THE FUTURE HORIZONS OF ACCOUNTANCY EDUCATION IN SOUTH AFRICA:
A REVIEW OF THE EDUCATIONAL REQUIREMENTS UNTIL 1990

by

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A thesis submitted in partial fulfilment of the requirements for

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DEPARTMENT : Accounting and Auditing
FACULTY : Economic and Political Sciences
PROMOTER : Professor C.W.I. Pistorius

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May 1976.
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B.S. Wolman.
In memory of
my parents
Abe and Rae Wolman
SUMMARY

THE FUTURE HORIZONS OF ACCOUNTANCY EDUCATION IN SOUTH AFRICA:
A REVIEW OF THE EDUCATIONAL REQUIREMENTS UNTIL 1990

by

Basil S. Wolman

PROMOTER : Professor C.W.I. Pistorius
DEPARTMENT : Accounting and Auditing
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Accountancy education in South Africa has been very controversial during the last few years and this controversy has led to objective self-examination by academics. It is acknowledged that there has been a substantial growth in the body of knowledge generally and that the accountancy profession has also been faced not only with a certain growth in the body of knowledge but also with a growth in society's expectations of the profession. These expectations could possibly include the expression of opinions on the fairness of profit forecasts and projected financial statements, including the underlying assumptions and opinions on management effectiveness. Possibly in order to accept greater responsibilities for the detection of fraud and the anticipated growth of society's expectations and greater utilisation of the computer, the future chartered accountant will be expected to be more proficient. This leads to the premise that a broader and less technique-oriented education is required for the future chartered accountant in South Africa.

Developments overseas indicate that the profession in certain
countries, plays a very active role in the final year of the accountancy education of its trainee accountants. In Australia the "Professional Year" is organised by The Australian Institute of Chartered Accountants. The candidates are evaluated on their performance during the "Professional Year" in assignments as well as their participation in classes, their attendance at the sessions and their successful completion of the final examination which is not regarded as a hurdle. In countries such as Canada and Scotland the institutes play an active role in promoting their own block-release courses. In Scotland the institute has its own lecturing staff, whereas in Canada in the province of Ontario, the Ontario Institute uses staff of the larger firms.

In certain countries the final qualifying examination is intended to be difficult and case studies are used in the examination. In certain countries where the universities play a greater role in the educational process, the accountancy institutes are phasing out their own examinations. In other countries multiple-choice questions are set as a matter of expediency, where very large numbers of candidates are involved. In other countries, where the number of candidates is not too large, candidates do oral examinations and write theses as well. Complaints have been made about the length of the courses in South Africa, but in some countries accountants qualify between the age of 30 and 35 years.

It is submitted that accountancy education in South Africa has been too technique-oriented and a happy medium between a conceptual and technique-oriented approach is required. University academics should play a more active role in research, and it is suggested that the Public Accountants' and Auditors' Board should give serious consideration to the possibility of reducing the number of contracting universities that are entitled to educate students for a Certificate in the Theory of Accountancy. The ultimate requirement for the profession is graduate entry, but in the interim
entry standards must be improved and it is suggested that
the profession create a trust fund utilising the Accounting
Development Foundation, which could make bursaries available
and thus make the profession more attractive to bright
scholars. It is not envisaged that a detailed common body
of knowledge should be prescribed, but more stringent
conditions for the approval of contracting universities,
should lead them to define the details themselves. This
should not be stultifying, but should encourage research,
which in the long run is in the interests of the profession.
Communication between members of the profession and academics
is essential to promote research and ensure the cross-
fertilisation of ideas.

It is also submitted that the final qualifying examination
has had an undesirable effect on the teaching. This is
because the proficiency of lecturers is generally measured
by the success of the candidates in the final qualifying
examination. A change in the format of the final qualifying
examination is therefore imperative. A more case-study
oriented examination is proposed.

The value of the practical-experience requirement (articles)
is questioned. It is submitted that for the practical-
experience requirement to be meaningful, greater and more
effective control of the quality of experience, to which the
trainee accountant is exposed, is required. It is
recommended that articles of clerkship or service contracts
be dispensed with and that the training quotas of firms
be more flexible, depending on circumstances. For the
trainee accountant's experience to be meaningful it is
necessary that his principal be kept up to date continuously
with the latest developments which will result in greater
emphasis being placed on required continuing education.
The introduction of a quality review programme by the
profession to improve the performance standards of its
members is recommended. The abovementioned requirements,
namely more effective control of practical-experience
requirements, the introduction of a quality review programme
and required continuing education as well as the fact that
the decision making process in the accountancy profession is
cumbersome and time-consuming necessitates a rationalisation of the controlling bodies in the profession.

A questionnaire was designed to test the opinion of the respondents with regard to various controversial issues surrounding accountancy education. It appears that the profession does not want to accept greater responsibility for the possible extensions of the attest function and it can be stated that it favours the retention of the audits of private companies.

It is thus obvious that certain changes are urgently required and the profession as well as academics will have to define its priorities very carefully. In the final analysis it must be borne in mind, that the profession must not overlook the public interest.
OPSOMMING

DIE TOEKOMSTIGE VERGESIGTE VAN REKENINGKUNDIGE OPVOEDING
IN SUID-AFRIKA : 'N OORSIG VAN DIE OPVOEDKUNDIGE VEREISTES
TOT 1990

deur

Basil S. Wolman

PROMOTOR : Professor C.W.I. Pistorius
DEPARTMENT : Rekening- en Ouditkunde
GRAAD : Doktor in die Handel

Rekeningkundige opleiding het gedurende die afgelope paar jaar twispunte in Suid-Afrika veroorsaak, wat tot objektiewe selfonderzoek deur akademici geleë het. Dit word erken dat die hoeveelheid kennis in die algemeen wesenlik toegeneem het en die rekenmeestersprofessie het nie alleenlik 'n toename in die hoeveelheid kennis ondervind nie, maar die verwagtings wat deur die gemeenskap van die professie gekoester is, het ook toegeneem. Hierdie verwagtings kan moontlik die uitspreek van menings oor die redelikheid van winsvooruitskattings en geprojekteerde finansiële state, insluitende die onderliggende aanname en menings oor bestuursdoelmatigheid, insluit. Om moontlik groter verantwoordelikheid vir die opsporing van bedrog te aanvaar en die verwagte toename in die verwagtings van die gemeenskap, tesame met die groter gebruik van die rekenaar, sal die toekomstige geoktrooierde rekenmeester meer bedrewe moet wees. Dit lei tot die stelling dat 'n breër en minder tegnies-georiënteerde opvoeding van die toekomstige geoktrooierde rekenmeester in Suid-Afrika verwag sal word.

Ontwikkelings oorsee dui daarop dat die professie in sekere
lande 'n baie aktiewe rol in die finale jaar van die rekenmeestersopleiding van leerlingrekenmeesters vervul.
In Australië word die "Professionele Jaar" deur "The Australian Institute of Chartered Accountants" ge-organiseer. Die kandidate se prestatie word ge-evalueer gedurende die "Professionele Jaar" op werkopdragte, bywoning en deelname in klasse, en die suksesvolle voltooing van die finale eksamen, wat nie as 'n struikelblok beskou word nie, is 'n vereiste. In lande soos Kanada en Skotland speel die institute 'n aktiewe rol in hul eie "blok-vrylatings" (block release) kursusse. Die Skotse Instituut het hulle eie doserende personeel terwyl daar op die groter firmas staat gemaak word om doserende personeel vir die Ontario Instituut se kursusse in Kanada te voorsien.

Die kwalifiserende eksamen van sekere lande is veronderstel om moeilik te wees en gevallestudies word in die eksamen gebruik. In ander lande waar die universiteite 'n groter rol in die opvoedkundige proses speel, word die eksamens van die institute geleidelik verminder. Veelvoudige keusevrae word gerieflikheidshalwe in sekere land gebruik waar die aantal kandidate hoog is. Waar die aantal kandidate nie so hoog is nie moet kandidate 'n mondelinge eksamen aflê en 'n skripsie skryf. Daar is oor die lengte van kursusse in Suid-Afrika gekla, maar in sekere lande kwalifiseer rekenmeesters tussen die ouderdom van 30 en 35 jaar.

Dit word gekonstateer dat rekenmeestersopvoeding in Suid-Afrika te tegniesgeoriënteerd is en 'n ewewig tussen "n konseptuele en tegniesgeoriënteerde benadering word benodig. Akademici moet 'n meer aktiewe rol in navorsing bydra. Dit word verder voorgestel dat die Openbare Rekenmeesters- en Ouditeursraad ernstige oorweging skenk aan die moontlikheid om die aantal deelnemende universiteite, wat geregtig is om rekenmeesters op te lei vir die Sertifikaat in die Teorie van die Rekeningkunde, te verminder. Die uiteindelike vereiste vir toetrede tot die professie moet 'n graad wees, maar die tussentydse toetredingsstandaarde moet verhoog word. Dit word voorgestel dat die professie die Rekeningkunde- Ontwikkelingstigting gebruik om 'n
trustfonds daar te stel en beurse hieruit aan te bied om die professie meer aantreklik te maak. Dit word nie in die vooruitsig gestel dat 'n algemene gedetaileerde leerplan voorgestel word nie, maar strenger standaarde vir die goedkeuring van deelnemende universiteite moet daargestel word, sodat hulle die besonderhede self kan voorskrif. Dit sal nie tot verydeling lei nie, maar sal navorsing bevorder, wat in the langtermynbelange van die professie sal wees. Kommunikasie tussen lede van die professie en akademici is noodsaaklik om navorsing te bevorder en om 'n kruisbestuwing van idees te verseker.

Dit word ook beweer dat die finale kwalifiserende eksamen 'n ongewenste uitwerking op die onderrig tot gevolg gehad het. Die oorsaak hiervoor is dat die bevoegdheid van die dosent bepaal word deur die sukses van sy kandidate in die finale kwalifiserende eksamen. 'n Verandering in die formaat van die finale kwalifiserende eksamen is dus noodsaaklik. 'n Meer gevallelijke georiënteerde eksamen word voorgestel.

Die waarde van die praktiese ondervinding-vereiste (klerkskap) word bevraagteken. Om die praktiese ondervinding-vereiste betekenisvol te maak, is dit nodig om meer en strenger effektiewe beheer oor die gehalte van ondervinding, waaraan die leerlingrekenmeester blootgestel word, te verseker. Dit word voorgestel dat die klerkskapkontrak of dienskontrak afgeskaaf word en dat die opleidingskwotas meer buigsaam moet wees na gelang van omstandighede. Om die ondervinding van die leerlingrekenmeester betekenisvol te maak, is dit nodig dat sy prinsipaal gedurig op hoogte gehou word van die nuutste ontwikkelings, waardeur die vereiste voorgesette opleiding meer beklemtoon sal word. Dit word verder voorgestel dat 'n kwaliteitsbeheerprogram om werkstandaarde van lede te verbeter, deur die professie ingestel word. Bogenoemde vereistes, naamlik meer effektiewe beheer oor die praktiese ondervinding-vereiste, die instelling van 'n kwaliteitsbeheerprogram, vereiste voortgesette opleiding en die feit dat die besluitnemingsproses in die rekenmeestersprofessie lomp en tydverterend is, noodsaak 'n rasionalisasie van die beheerliggame in die professie.
'n Vraeboog om die mening van respondente oor twispunte in rekenmeestersopvoeding te toets is opgestel. Daaruit blyk dit dat die professie nie groter verantwoordelikheid vir die uitbreiding van die ouditfunksie wil aanvaar nie. Die oudit van private maatskappye word nog deur die professie voorgestel.

Dit is ooglopend dat sekere dringende vereistes benodig word en dat die professie sowel as akademici hulle prioriteite versigtig sal moet defineer.

Ten slotte word dit gekonstateer dat die professie nie die openbare belang oor die hoof moet sien nie.
PART I

INTRODUCTION AND SOCIETY'S EXPECTATIONS OF
THE ACCOUNTANCY PROFESSION
CHAPTER 1

INTRODUCTION

1.1 The Aims of this Study

There has been an abundance of literature about the so-called explosion of knowledge and the anticipated accelerated rate of growth in the body of knowledge within the next decade or so. It has been anticipated that the general body of knowledge may be expected to double every five years. In the accountancy field it has been stated that the growth has been in expectations and not in knowledge. How will this growth of expectations and to a certain extent of knowledge affect accountancy in South Africa in general and accountancy education in particular?

During the last few years it has been contended that accountancy education in South Africa has been too technique-oriented with insufficient emphasis on the underlying philosophies and theory. At universities a different approach to the teaching of accountancy has caused accountancy education to become very controversial, but this is believed to be beneficial as now both the academics and the profession are thinking about the approach. It has further been contended that the technique-oriented approach, which is followed at many South African universities, is the result of the influence of the Final Qualifying Examination of the Public Accountants' and Auditors' Board.

The aim of this study is to review developments in accountancy education overseas, to see how these could be applied to South African accountancy education and to make recommendations which could possibly lead to improving accountancy education in South Africa. The structure of the profession in South Africa is reviewed, and recommendations are made where it is felt that the structure affects education.
1.2. Definition of Terms

The term Accountancy is defined by Kohler as being:

"The theory and practice of accounting: its responsibilities, standards, conventions, and activities generally; ... see accounting." 1)

The definition of Accounting is a problematical one. In an official policy statement of the American Institute of Certified Public Accountants this definition is given:

"Accounting is a discipline which provides financial and other information essential to the efficient conduct and evaluation of the activities of any organisation.

The information which accounting provides is essential for (1) effective planning, control and decision making by management, and (2) discharging the accountability of organisations to investors, creditors, government agencies, taxing authorities, association members, contributors to welfare institutions and others.

Accounting includes the development and analysis of data, the testing of their validity and relevance, and the interpretation and communication of the resulting information to intended users. The data may be expressed in monetary or other quantitative terms, or in symbolic or verbal forms." 2)

It is interesting to observe that in one of the most authoritative works on the common body of knowledge for accountants, Horizons for a Profession, there is no endeavour to define the term Accounting. 3) This is the reason given:

"Because accounting interrelates with other disciplines it is not readily subject to isolation from its environment. ... With the many and continuous changes that have already taken place in the accounting field over the years, the borrowing from other


disciplines, the changes in methodologies, etc., it is not only difficult, but undesirable to attempt to compartmentalize all accounting knowledge per se. Rather, this prescription for accounting should be thought of as an integral part of the total common body of knowledge." 4)

What is Education? Webster's Dictionary defines Education as:
"The process of educating; systematic training and development of the intellectual and moral faculties; the result of a systematic course of training and instruction."

It will be observed that the definition includes training. In this study the practical-experience requirements of the accountancy profession throughout the world are examined and practical experience is regarded as being complementary to formal education. There are valid criticisms against a practical-experience requirement and these are investigated in some detail. Education is viewed in the long-term, that is, pre-qualification as well as post-qualification is examined. It is necessary to determine whether the qualified accountant should continue his education as a mandatory requirement for reregistration as a practising accountant every few years.

1.3 Scope of Study

The study reviews pre-qualification and post-qualification education including practical-experience requirements and required continuing education. However, prior to defining the educational needs of the future chartered accountant, it is necessary to investigate what society will expect of the accountancy profession. This is based on the premise that if greater expectations will be made of the accountancy profession, a broader education, which will enable the future accountant to teach himself, is important. After investigating society's expectations the educational policies throughout the world are examined to determine the salient

4) Loc. Cit.
features of the various accounting institutes' policies. The profession in South Africa is examined in some detail with a review of the history as well as an in-depth study of the structure of the controlling bodies in this country. The role of the universities in accountancy education in South Africa is examined, as well as the influence of the Final Qualifying Examination of the Public Accountants' and Auditors' Board on the teaching of accountancy at various universities.

The philosophies of accountancy education are reviewed to determine what is relevant to South African accountancy education. Recommendations made in various chapters are summarised at the end of the study. It is not the aim of the study to define a detailed common body of knowledge, but rather to give broad outlines which the universities could use as guidelines for minimum requirements. This should not have a stultifying effect because the details are left to the universities and they can decide in what depth lectures on the various topics should be given. Certain core areas are required though.

1.4 Methods of Research

Accounting institutes throughout the world were visited to determine their views on various aspects of accountancy education. In various countries, namely Australia, New Zealand, United States of America, Canada, Scotland, England, Holland and Germany, as many universities as possible were visited. Their approach to the accountancy profession and accountancy education was also investigated. Chartered accountants in South Africa, both in and out of public practice, as well as academics were interviewed about their opinions on accountancy education in general. An in-depth study of available literature has also been made.

A questionnaire was designed, tested and sent to all chartered accountants in South Africa. The questionnaire endeavoured to test the opinions on the various aspects of
accountancy education and the practical-experience requirements. However, certain reservations are expressed about the questionnaire, as possibly not all chartered accountants have the necessary background to express a well-reasoned answer. The satisfactory response to the questionnaire does indicate that accountancy education in South Africa is causing its fair share of controversy and it is assumed that those chartered accountants who completed the form are interested in the subject. The question that arises is why the questionnaire was sent to all chartered accountants instead of reliance being placed on a random sample. The reason for this is that a similar survey was done in 1968 and although those results are not truly comparable with the present results, certain comparisons can be made. Some of the questions utilised in the questionnaire in Annexure A are similar to those used in the 1968 survey, and Section E of the questionnaire is based on a similar survey done in the United Kingdom. 5) When this part of the questionnaire was tested the observation was made that there were too many topics, and this comment has proved to be true because of the large number of questions rejected in this particular part. The frequency responses to most questions in the questionnaire have been exposed to a chi-squared (χ²) test to prove the significance of certain hypotheses. 6)

Certain provinces objected to the circulation of the questionnaire and it was decided to send out a covering letter different from the one originally designed. The questionnaires sent to the Transvaal had the original letter and those sent to the other provinces had the different one. Both covering letters are included in Annexure A. Because of the difference in the covering letters, in a comparative summary in which the statistical frequencies have been exposed to a chi-squared test, the percentages of "no responses" are indicated for the various provinces. It will be noted that in most instances the percentages of "no


6) For a brief discussion of Chi Squared tests see pp.267/269 and for the schedule indicating the relevant significance of the results see Annexure C.
responses" are higher in the other provinces than in the Transvaal, but not materially so and it is felt that this does not affect the validity of the survey.

The responses to the questionnaire are, it is stated, representative of the profession in South Africa, because the spread between the various occupations appears to have a very close correlation with the estimated situation in South Africa. No accurate statistics are available, but it is estimated that approximately forty percent of chartered accountants are in public practice. The geographical spread of the respondents is very similar to the actual geographical spread in South Africa, with the exception of a slight bias towards the Transvaal and slightly disappointing responses from the Cape Province. This may be because of the controversy referred to above, or because the questionnaires went out late to the other provinces or because the return date on the questionnaire was different from the one in the covering letter.

It is to be observed that the recommendations are based on what is felt to be best for the profession as a whole and have not necessarily been based on the responses to the questionnaire only.

1.5 Importance of Findings

It is acknowledged that changes in education for professions such as accountancy, do come about very slowly because of vested interests of members of the profession. If the recommendations made in this study will serve as a catalyst for further discussion within the profession and between the profession and university academics, and if they will lead to essential changes within the profession and at the universities, in an evolutionary way, this study will have been justified.
CHAPTER 2

SOCIETY'S EXPECTATIONS OF THE ACCOUNTANCY PROFESSION

2.1 Introduction

It is of the utmost importance to endeavour to assess the possible responsibilities of the profession in future, so that the future accountant can be given the necessary education to meet these challenges. The accounting profession generally accepts change very reluctantly, and this reluctance can possibly be understood when the legal responsibilities of the profession are taken into account. It is fair to assert that the accounting discipline has also been swept by the winds of change and has also had to contend with an avalanche of knowledge. Reference to the "explosion of knowledge" has often been made, which certain authorities describe rather as an "explosion of expectations" with regard to the accounting profession.

The development of man has been revolutionary during the last two decades and many of the developments could not have been contemplated during the early fifties. Needless to state that the information disciplines will be expected to rapidly follow suit in its development. In the past the accountancy profession was expected to extend its functions and it can safely be stated, without fear of contradiction, that these expectations will be maintained in future. The social environment is continuously changing and the social responsibilities of the accountancy profession will no doubt be greater in future. The profession in South Africa will have a very important role to fulfil in the long term development of the Bantu Homelands. It is fair to assume that corporations will be expected to give greater accountability in future. This accountability will also refer to such aspects as environmental controls, pollution controls, what is being done for its labour force and its contributions to society in general.

If the accountancy profession is to make a meaningful contribution to the development of society in future, it is necessary for it to strive to improve the quality of the information being used. The attest
function will remain important only as long as the credibility of the profession is beyond reproach and the information that is being attested is useful. Much of the present literature is devoted to means of improving accounting information. During these times of rampant double-digit inflation the limitations of financial statements based on historical costs have been proved beyond doubt. The various alternatives open to the profession have to be investigated.

2.2 Futurism

The accountancy profession will have to make changes and not wait for legislation to force it to accept greater responsibility. Various studies have been made in which the future of the accountancy profession has been discussed. This interest in the future is known as "futurism". In their book, "The Accounting Profession", the Buckleys refer to the two conceptual approaches of futurism: teleologically and ontologically. The former is based on destiny, fatalism or predestination, which implies that the accounting function is shaped by forces basically beyond its control. The ontological view is that:

"... invention and innovation are visible manifestations of a self-generating process or an institution having a dynamism and life of its own." 1)

The Buckleys believe that both the external and intrinsic forces combine to make institutions more compatible with their environments and that this compromise position is the way in which the accounting profession appears to relate to the future.

The future has been anticipated in numerous studies and the most notable is possibly John L. Carey's, "The CPA Plans for the Future". 2) (This is the report of the Committee)

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on Long-Range Objectives of the American Institute of
Certified Public Accountants under the chairmanship of
the late Robert M. Trueblood.) The book analyses
social and economic changes, implications of automation,
internationalism, the scope of accounting practice, the
future structure and education of the profession.
Subsequent to this, Charles T. Horngren endeavoured
to describe the profession in 1999. The article entitled
"The Accounting Discipline in 1999", suggested that the drudgery
involved in accounting work will be handled by computers.
He expects that the status of the profession will be
higher, because the profession responded positively
to its demands.\(^3\) Another attempt at futurism was,
"The Decline and Fall of the Accounting Profession", by Thomas
W. McRae, who records an address by a professor in the
year 2011.\(^4\) This attempt at futurism is very pessimistic indeed, and analyses the reasons, as seen in the
year 2011, for the fall of the accounting profession.

Canadian endeavours to anticipate the future are possibly
highlighted by the Summary Report of the Task Force
2000, which was commissioned in April 1969 to examine
the present and future roles of the chartered accountant,
and to formulate and recommend appropriate plans for the
development of the profession. The Report was
published in 1970.\(^5\)

In a prologue to the Summary Report, the committee endeavoured
to anticipate the future and saw the accounting profession
becoming more interdisciplinary and involved with problems
of pollution, urbanization, housing, transport and poverty
as well as those of social change. Human resources
accounting is seen as an important aspect for the future.
It further anticipated the importance of current value
accounting and the development of more meaningful financial
statements based on current values to report on management's

3) Horngren, Charles T., "The Accounting Discipline in 1999",
4) McRae, Thomas W., "The Decline and Fall of the Accounting Profession",
Accountancy, November 1961, as reprinted in The Journal of Accountancy,
June 1962, pp.66/68.
5) Canadian Chartered Accountant, November 1970, "Task Force 2000 -
effective use of resources. The prologue also anticipates the accountant in the future not being actively involved in the actual development and operating of systems but relying on management information systems specialists to do this. There can be no doubt that greater demands will be made of the profession in future and an examination of these demands may be fruitful. Briefly, these demands may be: accepting greater responsibility for the detection of fraud, attestation of projected financial statements and forecasts, expressing an opinion on the effectiveness of management, and accepting greater social responsibility.\textsuperscript{6)}

In an attempt to predict the future Frank S. Capon, a former president of the Canadian Institute of Chartered Accountants, wrote an article, "Choosing the Future of Accounting". He states that the profession has a choice of confining its task either to financial accounting and auditing, which he refers to as "the bookkeeping road" or following the uncharted road to total information processing, utilizing mathematical models or simulation of operations, thus providing the necessary information for management. He refers to the latter approach as the total accounting concept but believes that the excellence in the bookkeeping function will still have to be maintained.\textsuperscript{7)}

In another look into the future the Long Range Planning Committee of the Illinois Certified Public Accountants Society sees the profession undergoing a continued period of experimentation so as to define its area of expertise.\textsuperscript{8)} It states that techniques developed to assist in the expression of an opinion on financial forecasts have proved


\textsuperscript{7)} Capon, Frank S., "Choosing the Future of Accounting", Canadian Chartered Accountant, September 1972, pp.43/46.

unsuccessful and that the inclusion of human resources within financial statements have proved more intriguing than practicable.\(^9\) It also sees the future audit being a more automated discipline requiring the assistance of non-Certified Public Accountant data processing personnel.\(^10\)

A more recent analysis of the scope of services to be rendered by the profession has been published by the American Institute of Certified Public Accountants.\(^11\) It sees the accounting profession having to accept greater responsibilities because the public will expect a higher level of assurance on the reliability of financial reporting resulting in the search for more effective methods to attain this end.\(^12\) It sees greater involvement possibly in the areas of interim reports, profit forecasts, adequacy of record keeping and internal control and the economy, efficiency and effectiveness of government programmes. It states:

"This is not intended to suggest that the profession will ultimately decide that it should undertake to provide all of the requested services. But it should not decline to do so without giving full consideration to each request.\(^13\)

No doubt other attempts have been made at prophesying the future, but the conclusions of those referred to above see the profession accepting greater responsibility. An examination of potential extensions of the service of the profession follows, as such extensions will influence the education of the future chartered accountant.

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10) *Loc. Cit.*
2.3 Disclosure of Projected Financial Information and the Future Role of the Accountancy Profession in Relation thereto

It is a trite observation to state that the social environment has changed quite dramatically in the past decade or two and that this change can be expected to be maintained and possibly even to be accelerated. An examination of the literature abroad indicates that the disclosure of projected financial information may be of greater importance in the near future. An academic, Charles L. Mitchell, states in this regard:

"Private and institutional investors and their financial advisers are not concerned with corporate financial history as an end in itself, but only as a decreasingly useful piece of information for projecting future corporate profits and dividends and ultimately future share market value. The auditor must satisfy the needs of these people or suffer the fate of the dodo."  

The fate of the auditor may be over-dramatised but the whole question of projected financial information is a great challenge to the accountancy profession.

Before examining the pro's and con's of disclosing forecasted financial information, it is possibly necessary to define what is meant by forecasted financial information. It has been suggested that the publication of financial forecasts will imply regularity, that is, publication on an annual basis and if need be, revisions as well as distribution similar to that of annual reports. The financial information refers to earnings and earnings per share, measures of volume, assets and funds and cash flows.  

The forecasted information will be based on budgets but the forecasts may be slightly more conservative than the budgets for internal use. In determining the requirements of forecasted financial information it is necessary to examine the needs of the users. They are basically interested in the future

prospects of the company, the market prospects of the company and how the business will be financed. M.S. Cohen believes that forecasts for three years should be published showing both the current and the next two years, and the abbreviated balance sheet should show total assets subdivided into current and fixed, total funds, divided into shareholders’ funds, fixed term liabilities and other liabilities.\(^{16}\) He then continues expecting abbreviated cash flow statements to be shown over a period of three years, a statement of the assumptions on which the financial information is based, the sales for the three years indicating a measure of total profit for the three years, profit before tax and before extraordinary items for one year as well as after tax profits before extraordinary items for one year. Other information would be earnings per share after tax and before extraordinary items for one year, and the nature and amount both before and after tax of significant extraordinary items which are anticipated for a period of three years. The disclosure of extraordinary items is anticipated as being possible sale of fixed assets such as plant on the acquisition of new plant in substitution of the old plant. The statement of assumption is again required.\(^ {17}\)

The desirability of providing information for three years may be questioned, because of the rampant inflation that has occurred during the last few years. Antagonists of revealing projected financial information will no doubt state that present rates of inflation will make a mockery of the publication of projected financial information.

What justification is there for the inclusion of projected financial information in the annual reports for the companies? The rampant development of large groups has resulted in the shareholders being totally divorced

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17) *Loc. Cit.*
from management. The limitations of financial statements based on historical cost have been shown in no uncertain terms. It is argued that companies prepare budgets for internal purposes and all shareholders should be entitled to this information. Shareholders presently rely to a large extent on investment analysts who have much less information than that available to the management of a company. This leads to gossip and speculation which could have misleading results. It is further stated that the efficiency of management can be judged by comparing forecasted results to the actual results. Another justification for the inclusion of projected financial information is that the shareholder requires all relevant information to determine whether the investment is in his best personal interest. The best source to obtain this information must no doubt come from the management of the company and not be based on speculation.

Many disadvantages are cited and these are seen as the competitors gaining important information, the forecasts proving to be erroneous, and serious strikes and other natural disasters causing the forecasts to be inaccurate. It could possibly lead to market manipulation of the shares and to placing undue emphasis on short term expectations. Another disadvantage is that the company may not be run as efficiently as possible because the managers may be pre-occupied with meeting their budgeted figures, and long term benefits will be sacrificed to maximise present earnings. Other arguments against disclosure of budgets are that it may result in smoothing of income because profits may be suppressed so as to ensure that the following year's figures will be attained notwithstanding an anticipated drop in earnings. For forecasts to have any credibility an independent opinion is necessary and at this point in time it is very doubtful whether the auditing profession would be prepared to accept the great responsibility of expressing an opinion on annual forecasts because of the added legal responsibilities that will accompany such an opinion.
In another paper by Ronald Ma and Malcolm C. Miller, certain advantages resulting from a disclosure of forecasts are seen. A correct forecast will be an indication of management effectiveness, and management will improve internal forecasting systems which will result in improved company efficiency as well as increased productivity.\(^{18}\) They further state that disclosure of forecasts will be likely to improve the operation of the capital markets.

It appears that the publication of profit forecasts is receiving a fair amount of attention in overseas' publications. A recent editorial in *Accountancy*, the monthly journal of The Institute of Chartered Accountants in England and Wales, presents a strong case for the publication of annual forecasts. It admits that the first and second attempts at forecasting may not be as accurate as desired but this will improve. The editorial expresses the belief that the sooner publication of forecasts materialises the better.\(^{19}\)

A review of the situation in America reveals that the Securities and Exchange Commission has now allowed companies which are prepared to reveal forecasts which conform to certain directives of the Securities and Exchange Commission may be published. An American viewpoint with regard to publication of forecasts has been expressed by Ed Weinstein in a paper presented at the 2nd Jerusalem Conference on Accountancy. He refers to an editorial of the influential New York Times which stated that financial statements provided inadequate information about current value of a company's resources, its liquidity or anticipated cash flow, and states:

"As a rule, the reports are too general to meet the needs of users - with individual investors, bankers or public interest groups - who do not have access to inside information. Overall, the primary criticism directed at accountants is that they

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have been at pains to protect the interests of their corporate clients but not those of the outside public." 20)

Weinstein is rather perturbed that the benefits of forecasts are possibly being overplayed and that the investors public does not realise their limitations. He fears that the credibility of the profession may risk further damage if profit forecasts go wrong. However he continues:

"The consensus in the United States seems to be that forecasting is a concept whose time has arrived. Publication of forecasts is a part of the mosaic of full disclosures, considered highly desirable in the United States. Three states have joined the SEC in pressing for publicly available forecasts." 21)

The chairman of one of the "big-eight firms", Mr. Harvey Kapnick has averred that one of the corner stones of the Certified Public Accountant will be destroyed if the auditor reports on forecasted statements. He regards the most essential ingredient of the Certified Public Accountant, to be his independence, which could be impaired because of pressures to achieve the forecasts. 22)

A review of forecasting in the United Kingdom, done by D.R. Carmichael refers to pressures exerted and states in this regard:

"... the pressures exerted do not differ significantly from a management's natural desire to achieve acceptable operating results when forecasts are not published." 23)

An objection, that forecasts may be inherently inaccurate, requires further investigation. The experience in the late sixties and early seventies in the United Kingdom was fairly favourable, as approximately 80% of forecasts were within a margin of plus or minus 10%. 24)


21) Ibid., CVII pp.27/28.


regard to forecasts in South Africa, the present guidelines are based on those of the United Kingdom Institute. There have been one or two unfortunate incidences where the forecasts in prospectuses have been grossly overstated.

Although it is acknowledged that the uncertainty regarding forecasted financial information can create many problems, it must be borne in mind that changes in reported financial information to shareholders will come - albeit very slowly. If these changes result in the publication of forecasted financial information, it is necessary that the credibility thereof be enhanced by the opinion of outsiders. In such an event the accountancy profession throughout the world will have a great challenge. There are many problems that will require examination and the challenges will have to be met so that the problems may be resolved.

The scope of the examination will have to be determined. The present practice regarding prospectuses is basically checking the arithmetical calculations and if the underlying assumptions are completely unrealistic, a reservation no doubt will be made. As long as the underlying assumptions are clearly stated, it may be necessary for the auditor to refer positively to the underlying assumptions. The approach to the audit of projected financial information will have to be resolved. An examination of the literature reveals that attempts at designing audit programmes for forecasted information have been made.25) The wording of the independent report will have to be finalised. Another hurdle to be overcome is the spectre of legal liability which will be looming over the independent reporting accountant.

No doubt much empirical research is still needed regarding the publication of projected financial information as well as determining the auditor's role in this.

25) Attempts at formulating auditing procedures have been made by: Guy, Dan, "Auditing Procedures for Projected Financial Statements: A Suggested Approach", Canadian Chartered Accountant, June 1972, pp.20/27. Carmichael, D.R., "Composite Programme Profit and Working Capital Forecasts", Journal of Accountancy, January 1973, pp.45/47. This was based on the United Kingdom practice. One of the first attempts was by Yugi Ijiri, "On Sales and Budget-Auditing Standards, Accounting Standards..."
auditor of the future may ultimately have to express an opinion on profit forecasts and this may necessitate the formation of teams including economists, statisticians, market specialists and financial experts. It has been suggested that a panel, which is taken to be a "statutory panel", be formed with the power to accredit accountants as having the necessary competence to submit forecasts, to grant exemptions where publication may be damaging to a company, to approve forms and contents of forecasts and to advise whether revised forecasts are required.26) The future accountant will have to be very competent and specialisation will result. If the profession is expected to express an opinion on forecasted financial information, its members may be inclined to ask the question:

"If the attest function is presently to be extended, am I a man or superman?"27)

2.4 Half-Yearly Financial Statements of Listed Companies and the Auditor's Responsibilities

The importance of timely interim financial information for shareholders and other interested parties is not questioned. This information is required for important decisions by investors, governments and management of companies. It is imperative that if interim financial information is to be of any value, it must be released expeditiously. It has been stated:

"Quarterlies should be timely indicators of progress and problems, and we think it far more important to release highlights promptly than to issue complete statements tardily."28)

The whole matter of the auditor's involvement and interim financial statements has caused great controversy in the United States of America. During December 1974, the

Securities and Exchange Commission published amendments requiring listed companies to indicate, in annual financial statements filed with the Commission, certain quarterly data for the two most recent years. This information would include net sales, gross profit, income before extraordinary items and the effective accounting changes, and the net income. It appears that the Commission did not believe it necessary for the auditor to audit the interim financial statements but on the other hand it was not prepared to allow the footnote data to be indicated as unaudited. During April 1975 the Securities Exchange Commission amended the requirements for quarterly information allowing the word unaudited to be used.

The Securities Exchange Commission's proposal has caused great controversy and the Wall Street Journal of 11 April 1975 indicates:

"Unlike the rule for annual reports, there isn't currently any requirement that quarterly or other interim reports be subject to independent audit. However, quarterly reports of earnings and sales frequently have greater impact on the market of a company's stock than the annual report does."

One of the "big-eight" firms, Coopers and Lybrand, proposed a limited review of interim statements by public accountants. This led to the Securities and Exchange Commission being petitioned by another "big-eight" firm, Arthur Andersen & Co., to prohibit the limited review. The Securities Exchange Commission rejected the petition.

Many problems are foreseen. If opinions are to be expressed on half-yearly financial statements, the necessary auditing procedures will delay the publication of these results and will no doubt lead to an escalation in the auditing fees. Financial information to be of use must be speedily prepared and be reliable. The continuous

30) Loc. Cit.
spectre of legal liability also hangs over the heads of the accounting profession in the United States of America, and fears have been expressed that the image and credibility of the profession could take a further hammering if the profession was to become involved by expressing an opinion on interim financial statements. The American Institute of Certified Public Accountants issued a proposal whereby the limited review would include checking a company's accounting controls, identifying unusual changes in the balance sheet and submitting a profit and loss statement. The interim reports would be checked quarterly and the findings which would be for the benefit of the management and the board of directors would not be made public.

The responsibility for the preparation of interim financial statements must surely rest squarely on the shoulders of management. The reputation of directors of listed companies will be at stake if they make completely irresponsible half-yearly profit announcements. The Coopers and Lybrand proposal, namely that of a limited review, resulted in a great response, in the form of letters to the Financial Executive, a monthly journal. In one letter, Gary L. Depolo, vice-president and controller, Trans America Corporation states:

"... I continue to believe that financial statements are the primary responsibility of management and that the vast majority of managers act responsibly and do not need to be policed every three months." 32)

This view is very strongly supported in another letter which states:

"However, I remain dedicated to the principle that the integrity and completeness of interim reports are, and should remain, management's responsibility. This responsibility includes establishing ongoing internal control procedures to ensure that quarterly data are consistent with annual reports, that accounting principles and procedures are properly reviewed and that interim modifications are appropriate. ... For the vast

majority of companies I believe it is presumptuous for Coopers and Lybrand to suggest, either directly or by innuendo, that auditor participation in preparation of interim reports is needed and should be required." 33)

The Coopers and Lybrand proposal did cause considerable controversy and reaction from many financial controllers of companies. One response states:

"I think it is significant that some of our most notorious cases of management dishonesty have been reported to the public in annual reports to which an unqualified opinion of the auditors was attached." 34)

The author then continues that if major frauds could have been perpetrated with unqualified opinions and stringent procedures for test and verification, what are the prospects of frauds not being detected under the quarterly review techniques which were proposed?

A Canadian viewpoint states that often a company's interim financial statements have boosted shareholders' expectations of the year-end results and these expectations were not realised when the audited financial statements were published. This results in considerable hardship, and the question is posed whether the likelihood of such an occurrence would not be reduced if interim financial statements were audited. 35) The attestation of interim financial statements could possibly lead to new auditing techniques and a continuous audit may thus evolve. 36) The view that interim financial reporting may result in continuous auditing is also supported by American experts. 37) Siblin states with regard to interim reporting:

"Once again, if the public demands it the profession will have to fill the need and work out the mechanics." 38)


36) Loc. Cit.


In another American viewpoint, Ed Weinstein, finds the problem of legal responsibility disturbing and states:

"The New York Stock Exchange White Paper says that such reviews and consultations should not impose liability on the independent auditor. As these reviews become more formal and tend toward continuous auditing it is hard to see how such exposure can be avoided." 39)

Weinstein then continues to point a finger at security analysts who he avers are responsible for abuse emanating from interim reports and he continues:

"CPAs are being pushed into accepting greater responsibility for accuracy because of the failure of users to act prudently. And, rather than criticizing these users for their lack of perspective, and hence, responsibility to others in the market, the SEC moves inexorably ahead towards a 'solution' which may cause even more undesirable consequences." 40)

In South Africa, presently, Section 303 of the Companies Act, of 1973, as amended, provides that public companies should issue an unaudited half-yearly report, and if estimates are used, this must be stated. The half-yearly report must be approved by the board of directors and signed by two directors. The interim report is to be issued not later than three months after the expiration of the first six months and is to be sent to every shareholder and debenture holder. The proviso of "fairly present" also applies to the half-yearly financial statements.

The accountancy profession in South Africa will no doubt have many reservations about expressing an opinion on half-yearly financial statements. The present manpower shortage will no doubt be aggrevated by such requirements.

In the short to medium term it cannot be seen that the profession will become involved in the expression of opinions of half-yearly financial statements in South Africa. In the long term, possibly fifteen years, the possibility cannot be excluded that the profession may become far more involved in interim financial statements. It would be too bold to state that it will be the case, but this is a distinct possibility. As South Africa often follows the leading accountancy nations in the world, this could also lead to an expression of opinion on half-yearly financial statements.

Greater involvement by the accountancy profession in various aspects, such as the expression of an opinion on half-yearly financial statements, may result in the approach to auditing being changed, and the application of a high level of expertise in various disciplines is a very distinct possibility. A multi-disciplined approach consisting of experts from the fields of management science, budgetary control, computers, industrial engineers and economists is a distinct possibility. In the long term it may be that the complete structure of the accountancy profession may change. Accountants are generally conservative and changes come slowly but eventually they do materialise.

2.5. Detection of Fraud

The views of accountancy bodies throughout the world vis-a-vis detection of fraud are well known. The profession in South Africa does not guarantee that frauds will be discovered and the viewpoint of the South African profession is best illustrated by quoting from Statement A1 of The National Council of Chartered Accountants (S.A.) on Auditing Principles and Standards:

"An audit is not a substitution for management control and no guarantee is given or to be implied that an audit will necessarily disclose fraudulent misappropriations. Responsibility for the financial control and accounts of an undertaking rests upon those who are entrusted by the proprietors with its direction and management ... Management is responsible for safeguarding the undertaking and is not
entitled to rely upon the auditor for protection against defects in its administration and control." 41)

This viewpoint is endorsed by the Public Accountants' and Auditors' Board. It has always been emphasised that management accepts responsibility for financial statements of companies and that the auditor is only expressing an opinion on the fairness of such financial statements. The expectations of society vis-a-vis auditors' responsibilities and detection of fraud differ quite substantially from the auditing profession's interpretation of its responsibilities. Society places reliance on attested financial statements and A.M.C. Morrison sees the position as follows:

"Not surprisingly this view is scarcely shared by laity or the press, who consider that if an audit is not meant to uncover major frauds then it must be of very little use. ... It is absurd to say that they are all right subject of course to the possibility that undetected fraud may have made them all wrong." 42)

Notwithstanding the accountancy profession's endeavours to advise the investors public what its duties are, if a major fraud is eventually discovered the immediate reaction of investors is: "Where were the auditors?"

It may be stated without fear of contradiction that the investors' public does expect the auditor to discover frauds. An empirical survey undertaken in Australia by G.W. Beck confirms this opinion. Respondents were expected to indicate whether they strongly agree, agree, disagree, strongly disagree, or are unsure about certain statements. The statement with reference to fraud read:

"You expect the auditor to give you assurance that there have been no frauds perpetrated by company officials."


Of the 711 responses, 661 indicated that they strongly agree and agree with the statement. The reliance placed on the auditor was further illustrated by responses to two further statements. The statement,

"You would buy shares in a public company only if it was audited."

elicited 94% agreement. The responses to a statement,

"You expect the work of the auditor to give you assurance that:
the company's accounting statements are reliable."

elicited 98% agreement.43) There can be no doubt that the investors' public places substantial reliance on the accountancy profession. The chief accountant of the Securities and Exchange Commission in the United States of America, John C. Burton, is reported as saying:

"The historical position of the auditor, which seems to be that fraud is not what the CPA is responsible for finding, has to be reconsidered ..." 44)

The profession faces a great challenge in detecting management frauds. The credibility of the profession in the United States of America has diminished quite substantially because of law suits against public accountancy firms. The problem of detecting management frauds is a controversial one and Edward Weinstein states in this regard:

"There is a real difference of opinion within the profession regarding the feasibility of detecting management fraud. It has by no means been established that we have the ability to detect all management fraud. But it is our responsibility to determine when financial statements do not present fairly the financial position of a company. Therefore, if a fraud is so pervasive as to destroy the very fabric of financial statements we are auditing, we must strive to detect this condition. We may not always be successful, but we cannot afford to fall back on the thinking that collusive actions always defeat internal controls and circumvent audit techniques.


This negativism would stultify all efforts to discover such problems and thus be abandonment of duty. Therefore, I believe that the performance gap between public (here, the SEC) expectations and reality can be narrowed.

At the same time we and our public must recognize that every instance of management fraud cannot be detected. ... We must be diligent and thorough but cannot be scapegoats ..." 45)

It must be admitted that the profession may have to accept greater responsibility for the detection of fraud and this could possibly be achieved by having non-executive directors of listed companies serve on audit committees. The latter consists mainly of non-executive directors of companies and it is the committee's responsibility to liaise with external auditors on audit matters and financial reports. The committee consists mainly of non-executive directors and is thus independent of management. The audit committee forms an important link between the auditors and management.

The rationale for a corporate audit committee is that it enhances the independence of the external auditor. Advocates of the audit committee believe that it will enhance public confidence in financial reporting of companies and at the same time it assists the auditors in performing their functions more effectively.46)

A Canadian viewpoint on audit committees states:

"The audit committee gives the auditor an open forum at which he can present his point of view about certain matters which come to his attention during the course of his work. Considering the fact that a majority of the audit committee members are directors who are not part of management, the directors as a result of these meetings, can maintain greater control over management's activities. This liaison must increase the auditor's effectiveness." 47)


There can be no doubt that the standard of internal control should improve through the introduction of audit committees. It is sufficient to state that improved internal control no doubt facilitates the auditor's task. It may be argued that listed companies in South Africa are not that big to warrant the creation of audit committees, but experience has shown that even in large groups the internal control leaves much to be desired. On the directorates of these companies there are prominent members of the business world. It is believed that if these directors were better informed about the deficiencies in the internal control of these companies, they would attempt to improve the standard of internal control.

The position concerning the absence of fraud is seen by G.W. Beck as follows:

"If auditors are to attempt to meet the expectations of shareholders they cannot avoid expanding tests and embarking upon often wide searches for additional supporting evidence for particular transactions even when these appear to be validly recorded. In view of the time and cost involved and the fact that, even then, there would be merely greater assurance and not a guarantee of the fidelity of officials, this expansion appears to be unsupportable. One cannot realistically expect more than a competent audit that should, in the absence of clever manipulations, bring to light any major defalcations." 48)

The detection of collusive frauds and resultant legal liability in the event of collusive fraud not being detected, has had a major impact in the United States of America. Much research has been done recently in this regard and Douglas R. Carmichael, director of the Auditing Standards Division of the American Institute of Certifies Public Accountants, believes that an audit cannot be a guarantee against fraud, but it should provide reasonable grounds for the honest belief that material frauds have not caused the financial statements to be mis-stated.49) In his address Carmichael referred to

49) Carmichael, Douglas R., address given at the Annual Meeting of New Mexico Society of Certified Public Accountants, as reported in The Journal of Accountancy, June 1975, p.16.
"red flags" which should assist the auditor in detection of possible frauds, and which are warning signals which will require further investigation. These warning signals are seen where: companies with insufficient working capital continue their operations; extremely rapid expansion has taken place through new business or product lines; urgent needs for favourable earnings records to support the listed price of a company's shares; dependency on a single or relatively few products; participation in an industry experiencing a large number of business failures.\footnote{50}

In another article, Carmichael suggests a concept of levels of assurance which will range from a denial of assurance when a Certified Public Accountant is acting as an accountant in performing a write-up engagement, to a maximum form of assurance when he will be performing the traditional audit.\footnote{51}

Carmichael suggests that the users of financial information be informed about the different types of assurance. The profession has been reluctant to accept the concept of levels of assurance because of the fear that the investors' public will not understand the full implications of the different levels of assurance.\footnote{52}

If such a proposal was accepted, this would result in Auditing Standards Committees drafting the necessary standards of field work, giving the format of report that would adequately convey the nature of the examination involved, as well as indicating the limited degree of responsibility assumed.

In a recent article the question is asked whether the words of Lopis L.J., in the Kingston Cotton Mill Company: "He is a watchdog but not a bloodhound?" still apply. The question is raised whether the twentieth century auditor should not possibly be a cross-breed between a watchdog and a bloodhound?\footnote{53}

\footnote{50} Loc. Cit.


\footnote{52} Loc. Cit.

\footnote{53} McQuoid-Mason, D.J., and Cookson, C.R., "20th Century Auditors - Watchdogs, Bloodhounds or Crossbreeds?", The South African Chartered Accountant, December 1975, p.422.
Another way in which the profession in South Africa could possibly improve the performance of practitioners is to establish a quality review programme similar to the one instituted by the American Institute of Certified Public Accountants. A comprehensive discussion of the quality review programme is contained elsewhere.

Edward Weinstein states in this regard:

"The SEC contends that some of these frauds could have been detected through better application of existing techniques. It has proposed extensive peer review and the profession seems willing, although reluctant, to adopt such a program. ... The objective of peer review is to achieve uniform quality throughout a firm or an entire profession. ... There is little doubt that the public expects uniformity of professional practice up to a minimum norm. ... There is similarly little doubt that peer review is an excellent device for accomplishing the goal of standardizing practice. ... The SEC contends that in order to be effective, peer review must be conducted from outside a firm. It is not sufficient to have the review performed from outside the office unit. ... At some point in the future, as more experience is gained with outside review programs, both the profession and the SEC must assess the value of the 'independence' in the peer review concept against the duplicated cost caused by this approach." 54)

In conclusion it may be stated that detection of material frauds must not become an obsession as it will cloud the more meaningful services that the accountancy profession has to offer. It is believed that material frauds will be detected during the normal auditing procedures if these are performed with the requisite degree of care and skill. The auditing profession throughout the world has a major public relations programme, that is to keep the investors' public better informed of the profession's responsibilities.

2.6 Management Audits

The term, management audit or management auditing, is a very controversial one indeed. Operational auditing is another phrase for this procedure. One definition of the management audit is:

(quote) "involves a comprehensive and constructive examination of an entity or one of its components, such as a division or department - its plans and policies, its financial controls, its methods of operation, its use of physical and human resources - in order to evaluate the effectiveness of management in carrying out assigned responsibilities and accomplishing specified objectives; a review of the system of internal control inclusive of administrative controls as well as accounting controls is clearly envisioned in a management audit." 55

Another definition of the management audit reads:

"... is an audit which results in a statement of opinion by a CPA with regard to the performance of the management function." 56

Another definition, rather vague though, is:

"Management auditing is characterized more by a state of mind than by distinctive methods." 57

In another analysis of the meaning of the term, management audit, William L. Campfield endeavours to conceptualise a management audit in preference to a strict definition

"An informed and constructive analysis, evaluation, and series of recommendations, regarding the broad spectrum of plans, processes, people and problems of an economic entity." 58


Campfield sees the management audit as a three-fold approach, with the first being a review of the prescribed organisational structure, which entails an investigation of personal inter-relationships, policies, procedures, information systems and flows and decision centres in order to determine what management has established as optimum arrangements for following an entity. The second aspect is evaluating the live entity. This entails a determination of whether the management is accomplishing the established objectives and a measurement of how the results achieved compare with pre-determined goals and standards of performance. The third aspect is searching for profit inhibitors such as poor organisational structuring and responsibility assignment, breakdown in work flow, ineffective communications and the disclosure of results that fall significantly below the established standards. 59)

Another definition of the management audit reads:

"Examination and evaluation of management information systems. Review of business policies and plans, and of investment decisions (in the light of evidence of consideration and evaluation of alternatives, inter-firm comparisons and particular industrial or commercial background etc.). Examination of reasons for not achieving the planned results. (If good plans are achieved, sound management can be assumed; the converse is not necessarily true)."  60)

Before investigating other controversies surrounding the management audit, an analysis of the demand for a management audit should be made. It may be stated without fear of contradiction that: "Losses due to mismanagement of companies is most probably substantially higher than losses due to fraud ..."  61)

In his analysis of the social role of public accountants in Australia, G.W. Beck tested society's expectations

59) Loc. Cit.
in this regard and respondents were requested to indicate their degree of agreement or disagreement with the statement:

"You expect the work of the auditor to give you assurance that management is efficient."

Of the 711 responses, 48% strongly agreed with the statement, and 23% agreed, thus indicating that 71% are in agreement with this particular statement.\(^{62}\) In analysing these expectations, G.W. Beck does not envisage the management audit as being a part of the model role of the future accountant. He states:

"The functional implications of auditors attempting to provide information on the efficiency of management generally are, from the auditor's point of view, quite disconcerting. This action would call for a degree of expertise that must be beyond what may reasonably be expected of auditors. The efficiency of technical management outside the accounting department can usually be assessed only by those at least as well versed in the specialist function. ... It seems auditors should endeavour to make shareholders aware of the impossibility of complying with this expectation."\(^{63}\)

The rationale for the management audit can further be justified by the fact that management is an important resource and it is in the interests of shareholders to know how effectively their company is being managed. The importance of management condition must be stressed as financial conditions are not the only indicators of the ability to survive and grow.\(^{64}\) Implication that management condition is as important as financial condition implies that the financial audit and the financial statements do not convey the complete picture of an organisation. Management effectiveness of any company is an important indicator for investment analysts but the investment

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analyst as an outsider will find difficulty in assessing the effectiveness of management. Shareholders also have a vested interest in a management audit because they want to know how effectively their capital is being utilised. During the last decade or so the social environment has changed quite substantially and public interest must not be overlooked. The public interest has a hard look at corporate management in its management of scarce resources and other aspects such as environmental controls.

A vexed question is determining who should do the management audit. Should it be done by internal auditors or should it possibly be done by the external auditors? If ultimately a report is submitted to the shareholders then this will preclude the internal auditors from expressing an opinion. Many writers endeavour to present a strong case for the Chartered Accountant or Certified Public Accountant rendering this service. The justification for this is that the audit of management can be regarded as a logical extension of the current audit function. There are differences of opinion as to whether this is in effect the case as it may be affirmed that the management audit could be regarded as a special type of management service engagement. Corine T. Norgaard concurs with the view that it is an extension of the traditional audit and she states:

"This is true because of the entity—encompassing nature of the operational audit and because the professional accountant's concept of its purpose is the discovery of problems rather than their solution. On the other hand, the management services engagement is generally considered to be oriented toward the solution of a specific problem or problems which are known to exist when the engagement is undertaken." 65)

Justification for the accountancy profession doing the management audit is that in the financial audit a firm's internal control is reviewed and the audit of management

would to a large extent involve a similar evaluation. It is further stated that the accountancy profession enjoys professional recognition and the standards of competence and independence are an invaluable asset in this regard. 66) Another justification is that as the chartered or certified public accountant conducts a financial audit other professionals need not be called in. Utilisation of the external auditors to do this assignment will result in a reduction of the costs involved. Another view is expressed by Morse, who states:

"The term 'performance auditing' suggests that the full range of management's responsibilities are within the auditor's purview. This brings further extension of his evaluations to the accomplishments of the organization or the effectiveness of its operations in achieving established or prescribed goals or objectives. This is a logical extension of the auditor's work." 67) An attempt at futurism has been made by the eminent author, Howard F. Stettler, in his article, CPAs / Auditing / 2000 ± who does not envisage the auditor expressing an opinion on management. He considers management capability to be qualitative rather than quantitative factors, whereas quantitative results could be reviewed objectively. 68) Opponents of the management audit affirm that "Monday morning quarter-backing" or hindsight is very difficult as an outside auditor, who does not have the same technical know-how of that particular industry, cannot place himself in the same position as members of management when they made critical decisions. The auditor will not be under the same pressure and stresses as the manager was at that particular point in time.

Another survey, indicates that the management audit is

not a potential extension of the attest function. 69) The responses of public accountants indicate that nearly 83% are against the extension of the attest function to include an opinion on management effectiveness, whereas 100% of the controllers of corporations indicated that they were against such an extension – thus a unanimous rejection of this potential extension. The reason for the rejection by the public accountants was that there were no meaningful standards of measurement by which to attest management efficiency. 70)

Many problems will be encountered, no doubt, before the management audit will eventually be accepted by the accountancy profession throughout the world. The significant problems are: that there are no generally accepted auditing standards and procedures for management audits; that there are no objective criteria for the evaluation of managerial abilities and performance; that the competence of auditors to conduct and report on such audits may be suspect; that the question of auditors’ independence and legal liability are vexed problems to be overcome in relation to the management audit. The framework for the future management audit is seen by John C. Burton as entailing four areas: firstly criteria for the management audit must be defined; secondly standards of managerial performance must be developed; thirdly a method of reporting must be established to make the results of the report meaningful, and finally not only must the necessary management auditing procedures be developed, but also standards of documentation to support the report must be given. 71) Burton states that the audit must deal with the objective and the measurable and he sees objective as a "detached, impersonal and unprejudiced." 72) He does not see objectivity as countability and the ability to recount, and states:

"Two ... auditors might emerge from an audit with slightly different

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69) Imke, Frank J., "The Future of the Attest Function", The Journal of Accountancy, April 1967, p.55. The survey was not designed to make statistical inferences but to determine whether there is a consensus for the extension of the attest function.

70) Loc. Cit.


72) Ibid., p.42.
results but the variation should not exceed that attributable to normal sampling errors if due professional care is used." 73)

The development of performance standards is seen by Burton to be evaluated in terms of procedures and results. With regard to procedures he divides managerial control into five groups: organisational control, planning and information systems, asset management, marketing systems and production systems. Each of these sections is sub-divided into additional groups. He refers to the development of financial standards for the evaluation of performance and cites three measures of relative success. They are:

1. Ratio of operating return on sales earned by the company compared to the return earned by the industry.
2. Ratio of operating return on long-term capital earned by the company compared to the return earned by the industry.
3. Comparative variability in return compared to average industry variability." 74)

The development of a management audit report is no doubt problematical because of the legal implications. Authors see it as being a comprehensive one indicating exactly what has been done. Burton sees the report divided into three sections: a scope section where the nature of the examination will be described; a section in which the auditor evaluates the past performance of the company; and finally a section in which the auditor evaluates current management procedures of the corporation. Burton sees this audit report possibly being as long as two or three pages. 75) The lead for the management audit is there if the expectations of society are taken into account. There are many important issues to be clarified such as the scope of the management audit as well as the professional standards which are applicable. Antagonists who affirm that the chartered accountant

73) Loc. Cit.
74) Ibid., p.43.
75) Loc. Cit.
does not have the competence to do this, may be given the counter argument that major changes in the accountancy profession did not occur overnight and that this competence can be achieved in the future by adjusting the educational and training requirements. It is also agreed that the management audit will have to be performed by a group of specialists. Antagonists of the management audit may be correct in asserting that a fair amount of subjectivity may be involved, but there are many objective criteria by which management performance can be evaluated.

The views of the profession in South Africa are divided, but generally they do not favour an extension of the attest function. Analysis of the empirical research appears elsewhere. An investigation into the approaches of other countries may shed some light on the prospects for the management audit. Herbert Siblin states that it is unlikely that the management audit will be accepted by the profession in Canada because of great practical difficulties and does not foresee its introduction in the future.\(^{76}\) Although the management audit in Sweden has been in practice for many years, it is still a controversial topic and Bo Fridman, a national author at the Tenth International Congress states:

> "When auditors themselves have an unclear concept of the scope and purpose of the examination of the management it is not remarkable that misunderstandings should arise among the users of audit reports." \(^{77}\)

2.7 Management Advisory Services

Management advisory services departments of many firms have grown quite substantially during the last decade or two. A controversial aspect of management advisory services is the question of auditor's independence. It is stated by certain authorities that involvement with


management advisory services impinges on the independence of the auditor. Mautz and Sharaf state:

"There tends to come a time in any arrangement, for management services when the mutuality of interest of the consultant and the client becomes so significant that the consultant ceases to be independent in the sense that we feel he should be for auditing purposes. Management requests advice because it expects to use it; the consultant gives it to be used; the consultant knows that as a consultant he will be judged by the ultimate usefulness of his advice in bringing success to management's efforts. He has had a hand in shaping managerial decisions and will be judged by management on the same basis that the management itself will be judged. How then can he claim to be completely independent?" 78)

This a very convincing argument, based solely on principle, will be difficult to counter.

It is acknowledged that one's independence may be affected by the fact that one's own management advisory services department has designed a system on behalf of a client but it is imperative that management be given various alternatives so that it may take the final decision. It must be stressed that management must take the decision.

A justification for the management advisory services may be stated as follows:

"Timely advice given by accountants which iron out the weaknesses in a client's organisation will be appreciated more than an analysis of why things went wrong in the organisation at a later stage." 79)

In a discussion on management advisory services and accounting, Benzion Barlev and Arieh Goldman see the question

78) Mautz and Sharaf, The Philosophy of Auditing, American Accounting Association, Monograph No. 6., p. 222.
of independence in the following manner:

"It should be realized, however that the question whether the two can be combined is no longer open. MAS has already become an integral part of auditors' activities. Attention should, therefore, focus on devising methods by which auditors may provide MAS without adversely affecting their auditing responsibilities."

They continue:

"Auditing services are, however, the raison d'etre of the accounting profession and only CPAs are allowed to provide such services. In contrast, MAS can be provided from many sources. If these latter functions will become the major aspect of auditors' activity, the accounting profession may lose its professional uniqueness and challenges may arise to the legitimacy of its MAS engagement from others who offer advisory services."

In conclusion it may be stated that the services of the management advisory services department of large accountancy firms will be demanded as long as they meet the requirements of their clients. If the demand is there, the challenge should be met.

2.8 Conclusion

The challenges facing the accountancy profession in future will be great and expectations of society will change rapidly as is shown by the changes during the past decade. The accountancy profession throughout the world has suffered because of the many cases against it, particularly in the United States of America, have made its credibility suspect. Even in South Africa there are certain cases pending which may further damage the image of the profession.

A mammoth task facing the profession is the improvement of the credibility of information reflected in financial statements. Double-digit inflation has made a mockery of financial information based on historical costs data. A proliferation of literature during the last year indicates that the matter is receiving attention. The objectives

80) Barlev, Benzon and Goldman, Arieh, "Management Advisory Services and Accounting", Abacus, June 1974, p.82.
of the preparers of financial statements will have to be defined clearly, and indications are that the future chartered accountant will require a broader education to meet the challenges. If galloping inflation continues, the future chartered accountant will require greater depth of knowledge in various subjects such as economics and mathematical techniques.

The growth of multi-national groups with their accompanying accounting problems will also test the future accountant's competence. Other demands may also be made on the auditing profession. It appears that in the taxation field, the accountancy profession will be expected to make a greater contribution if the Department for Inland Revenue moves to self-assessment. If the indications that this move to self-assessment may gain momentum in the near future are true, the already overburdened accountancy profession will have to face another challenge with an increased work load.

A fairly detailed exposition of society's expectation of the auditing profession has been made above. The purpose has been to state the premise, that because of anticipated growing expectations of the accountancy and auditing profession in future, the future chartered accountant will require a broader education. It is acknowledged that many of the anticipated changes may at this particular point in time be hypothetical, but at the same time it must be acknowledged that the accountancy profession has generally been conservative in the past and has accepted changes very slowly. These changes do eventuate and it is important to bear in mind that the future chartered accountant must have a broad education and not just simply be an "accounting technician" or "glorified bookkeeper". He will have to be a thinking accountant capable of evaluating and solving complex problems.
PART II

ACCOUNTANCY EDUCATION AND TRAINING AROUND THE WORLD
CHAPTER 3

ACCOUNTANCY EDUCATION AND TRAINING IN AUSTRALASIA

3.1 The Accountancy Profession in Australia — Introduction

The profession is controlled by two bodies: the Australian Society of Accountants and The Institute of Chartered Accountants in Australia. The latest statistics (at 30 June 1975 reveal that the membership of the Australian Society is in excess of 39 500 and that of The Institute of Chartered Accountants in Australia is in excess of 7 800. A breakdown of the membership of the Australian Society of Accountants reveals the following fields of employment:

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<th>Field</th>
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<tbody>
<tr>
<td>Commerce and Industry</td>
<td>55</td>
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<tr>
<td>Public Practice: Principals</td>
<td>14</td>
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<td>Employees</td>
<td>7</td>
</tr>
<tr>
<td>Government (Commonwealth and State)</td>
<td>21</td>
</tr>
<tr>
<td>Academic</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

A breakdown of the membership of The Institute of Chartered Accountants in Australia reveals the following classification:

<table>
<thead>
<tr>
<th>Field</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Practice: Principals</td>
<td>49</td>
</tr>
<tr>
<td>Employees</td>
<td>25</td>
</tr>
<tr>
<td>Not in Public Practice</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

From the abovementioned statistics it is apparent that The Institute caters mainly for the accountant in public practice whereas the Australian Society caters mainly for those not in public practice. It is wrong, however, to assume that the latter has no interest in public accounting, as the abovementioned classification indicates that the Australian Society

1) The Chartered Accountant in Australia, "Structure of the Profession in Australia", October 1975, p.18. It is to be noted that approximately 3 000 members of The Institute are members of the Society.
has more members in public practice than The Institute.

The approach to accountancy education during the last decade has changed very dramatically as a result of the recommendations made by Professor William J. Vatter of the University of California at Berkely, during 1964.\textsuperscript{2} There is a certain similarity of approach by the two controlling bodies in Australia as a result of both having accepted the recommendations of the Vatter Report. These recommendations caused a metamorphosis in Australian accountancy education. A survey of practising accountants in 1964 revealed that only 28.2\% had completed a high-school education of university entrance standard.\textsuperscript{3}

3.2 Educational and Training Policy of The Institute of Chartered Accountants in Australia

Members of The Institute are classified either as Associates or as Fellows. An Associate in public practice may become a Fellow after three years. Associates not in public practice may apply for Fellowship status after ten years as a member holding a responsible position.

The underlying philosophy of The Institute is based on the premise that the first task of a university is to educate seekers of truth and to devise systems of knowledge, whereas professional education arises from the application of basic disciplines to problems. A.W. Graham refers to the Martin Report in a paper and states:

"In brief, the Martin Report attempted to define and to some extent limit the role of the university. While it made clear that the universities must have regard to the needs of major professions in an indirect sense, it was not the universities' function to provide detailed technical courses to meet the needs of professional institutes, which should make arrangements with other educational...


\textsuperscript{3} Gynther, Reg S., "Trends in Australian Accounting Education", in Accounting in Australia, October 1972, p.8.
institutions to supplement suitable general university degree courses with a post-graduate course especially designed for those bodies." \(^4\)

The requirements for membership of The Institute of Chartered Accountants in Australia are the completion of an approved tertiary course, the completion of The Institute's Professional Year of Study and the completion of the required service. The candidate, who must be at least 21 years of age, has to submit evidence of good character. \(^5\)

The minimum entry requirement is either a university degree or a diploma from a college of advanced education. The status of the colleges of advanced education is the same as that of universities. The minimum requirements of an appropriate tertiary course are a three-year major in accounting as well as courses in auditing and commercial law (including company law and taxation). \(^6\) The tertiary courses are reviewed annually to determine whether the courses are acceptable and a list of acceptable courses is published annually. If a candidate's degree does not have the minimum requirements, either he must obtain a pass in the required subjects at another institution or obtain a pass in a corresponding Institute examination. \(^7\) Candidates who provide evidence that they cannot be admitted to a suitable tertiary educational institute may follow the Institute Alternative Examination. Teaching is not provided by The Institute. The examination syllabus which extends over five years of part-time study consists of fifteen courses. \(^8\)

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7) *Loc. Cit.*, par.3.3(a) and (b).

8) *Loc. Cit.* par.3.4.
3.3 "Professional Year"

The unique aspect of The Institute's approach is the Professional Year, the purpose of which is to orientate the graduate or diplomate to the needs of the profession, to extend his understanding of professional accountancy and to provide the entrant to the profession with the means of applying his knowledge to the needs of practice. To be eligible for membership to the Professional Year a candidate must be a "Registered Student", that is, be on the register of examination candidates. He must have successfully completed an approved tertiary course, or if he has studied part-time, completed The Institute's Alternative Examination Syllabus. He must have been employed full-time by a chartered accountant for at least twenty-two weeks, and must have attended an approved staff training course.

The Professional Year consists of twenty-one three-hour fortnightly sessions. Attendance at these sessions as well as completion of written assignments is compulsory. A booklet for each session contains an instruction list, a list of prescribed reference books, a brief summary of the most important principles involved in the relevant topic, as well as case studies to be completed by the participants. The written assignments are to be completed two weeks prior to the relevant session at which the case study will be discussed. The answer is marked and handed back to the student at the relevant session. The regulations specifically state that successful completion of the written assignments is a requirement in determining whether a candidate has successfully completed the year. The assignments are primarily used to determine the extent of a candidate's knowledge in the various subjects and to enable the discussion leader to remedy any deficiencies. Candidates are expected to read the latest Australian accounting journals and the financial publications.

10) *Loc. Cit.*, par.3.62.
The final examination is an "open-book" examination and a candidate is permitted to take reference books, relevant statutes and personal notes into the examination. The questions are based on practical situations facing practitioners and not mere reproductions of theoretical approaches. It is felt that no benefit really accrues from having the reference books available and extensive use of these will be time consuming. \(^{12}\) The pass requirements for the Professional Year are: satisfactory attendance at discussion sessions, satisfactory participation in group discussions, adequate standard of written assignments throughout the programme as well as the satisfactory completion of the final examination. A significant failure in any one of these pass requirements results in the failure of the whole programme. \(^{13}\) It is significant to observe that a candidate will be allowed to present himself twice only for the Professional Year. \(^{14}\)

No defined course content is described as it is regarded as being the application of knowledge, and the topics for the programme will be determined from year to year depending on existing circumstances. The programme for the 1975/1976 year reveals the course contents as follows (the sequence being in order of presentation):

<table>
<thead>
<tr>
<th>Session No.</th>
<th>Subject</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Business Communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Clear Writing</td>
<td>a) Written exercise</td>
</tr>
<tr>
<td></td>
<td>b) Effective Speaking</td>
<td>b) 400-word paper, short address in session</td>
</tr>
<tr>
<td>2.</td>
<td>Professional Practice and Organisation</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Audit I (Concept, objective, internal control, opinion)</td>
<td>Written paper</td>
</tr>
<tr>
<td>4.</td>
<td>Presentation of Accounts</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Institute Recommendations (Accounting standards)</td>
<td>Question paper</td>
</tr>
<tr>
<td>6.</td>
<td>Tax I</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Consolidations (general concepts)</td>
<td></td>
</tr>
</tbody>
</table>

\(^{12}\) Ibid., p.17., par.11.61.

\(^{13}\) Loc. Cit., par.11.71.

\(^{14}\) Ibid., p.18. par.11.8.
<table>
<thead>
<tr>
<th>Session No.</th>
<th>Subject</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.</td>
<td>Computing Systems</td>
<td>Case study</td>
</tr>
<tr>
<td>9.</td>
<td>E.D.P. and Audit</td>
<td>Case study</td>
</tr>
<tr>
<td>10.</td>
<td>Audit II</td>
<td>Case study</td>
</tr>
<tr>
<td>11.</td>
<td>Valuation of Shares</td>
<td>Case study</td>
</tr>
<tr>
<td>12.</td>
<td>Tax II</td>
<td>Case study</td>
</tr>
<tr>
<td>13.</td>
<td>Companies Act (Liabilities and responsibilities of auditors, directors</td>
<td>Question paper</td>
</tr>
<tr>
<td></td>
<td>and secretaries)</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Equity Accounting and Advanced Consolidation</td>
<td>Case study</td>
</tr>
<tr>
<td>15.</td>
<td>Investigations, including Prospectus and Takeovers</td>
<td>Case study</td>
</tr>
<tr>
<td>16.</td>
<td>Farm Management Accounting</td>
<td>Case study</td>
</tr>
<tr>
<td>17.</td>
<td>Executorship, Bankruptcy and Liquidations</td>
<td>Case study</td>
</tr>
<tr>
<td>18.</td>
<td>Institute Recommendations II</td>
<td>Case study</td>
</tr>
<tr>
<td>19.</td>
<td>Accounting Problems in times of Inflation</td>
<td>2 000-word paper</td>
</tr>
<tr>
<td>20.</td>
<td>Estate Planning</td>
<td>Case study</td>
</tr>
<tr>
<td>21.</td>
<td>Financial Management, Budgeting, Management Accounts and Report</td>
<td>Case study</td>
</tr>
</tbody>
</table>

An analysis of the abovementioned subjects reveals that the course is directed to the needs of the practitioner.

Each group has a discussion leader and a supervisor. The former is responsible for the marking of assignments and leads discussions, whereas the latter assesses the continuity of a candidate's progress. A discussion leader should have had at least five years practical experience as a member, or employee of a member, in public practice. The use of academics is not encouraged as the course is intended to be a programme of practical applications. The number of discussion leaders per group is to be restricted to as few as possible, which should foster the development of a special interest by


16) The Institute of Chartered Accountants in Australia, Professional Year 1975/1976 - Organisation and Administration, p.3.
discussion leaders in candidates, which also facilitates the overall assessment of candidates at the termination of the programme.

The assignments of candidates are not given a percentage, but remarks such as "Very Satisfactory", "Satisfactory", "Doubtful" or "Inadequate". The discussion leader is expected to submit two reports, after the completion of each session, to the State Educational Officer, namely a "Discussion Leader's Report" and a "Session Attendance Record", which is signed by the candidates. Within twenty-eight days of the last session a Record of Performance is returned to the Education Officer of The Institute by the State Registrar. A final Assessment report is completed by the discussion leaders or supervisors reflecting the candidate's attitude, effort and knowledge displayed during the year.\(^\text{17}\)

An examination consisting of two three-hour papers is written after the successful completion of the Professional Year. The examination is not intended to be a hurdle for the candidate, but rather to ensure that nobody is allowed to practise who does not have the necessary competence. The examinations are assessed as "Pass" or "Fail". 87% of the 845 candidates who completed the 1974/5 Professional Year were successful in the examinations.\(^\text{18}\) The statistics for the 1973/4 Professional Year reveal that 871 of 1013 completed the year. 84% of the 871 passed the Final Examination.\(^\text{19}\)

The benefits of the programme are seen to be threefold. The first benefit is the vast improvement on traditional methods of assessing a candidate's suitability for membership.


\(^{19}\) The Institute of Chartered Accountants in Australia, letter from the Education Officer, M. North, dated 22 December 1975.
"There should be no frustrations arising from the exposure to the vagaries of chance, for the assessment of the candidate's performance will be made by The Institute on the basis of the work actually undertaken." 20)

The second benefit is the involvement of Institute members in the educational process. The third benefit is relieving the tertiary institutions of their concern that some of the products of their teaching may not be adequately prepared for practice. 21)

At the inception of the course many problems were expected but it appears that the experience gained from each presentation is improving the standard of the presentations. The reaction of the members of The Institute is one of utmost satisfaction, and the leaders of the profession in Australia feel that they are leading the world with their concept of the Professional Year. An interview with Mr. A.W. Graham, the National Registrar of The Institute of Chartered Accountants in Australia, revealed that no material changes to the Professional year are envisaged. A method of establishing consistency of standards between different centres must still be found.

The underlying philosophy of the Professional year is discussed by A.S. Carrington and it appears that the original suggestion was made by Mr. J.R. Harriwell, a vice-president of The Institute, in an unpublished paper. Carrington states in this regard:

"There is considerable precedent for carefully controlled and on-the-job training in other professions such as medicine or engineering. It would not be impracticable to introduce a similar approach into accounting. ... This proposal would require each candidate to be employed in an approved position. ... This would represent only a section of the practical experience requirement. In addition the professional body itself would arrange a series of demonstrations, sessions

21) Loc. Cit.
of simulated work assignments and so forth, appropriate to
the field of interests of the entrant and participation by
the candidate would be compulsory. Furthermore, the final
admission examination would not be a mere repetition of the
academic tests passed by the candidate in his formal educational
programme, but would be geared to testing his ability to
apply his knowledge to specific professional assignments
of the type dealt with in his practical experience
programme. Since this professional experience follows
logically after completion of the academic preparation, and
because it is sufficiently structured to permit reasonably
rapid and comprehensive coverage it need not be unduly protracted.

... A one year period offers sufficient time without being
long enough to discourage professional membership on the part
of graduates who might otherwise remain independently outside
the profession or be attracted to one of the newer and potentially
competitive professions such as management consulting, operations
research or systems analysis."

The Professional Year is indeed a novel approach and the
members of The Institute in Australia have not simply
subrogated their educational duties to other institutions.
There may be certain reservations as to how long the members
of The Institute will maintain their enthusiasm to be
discussion leaders and supervisors. The pressure of
practice must ultimately affect them. However if this
assessment is proved wrong, the Professional Year has a
lot to commend it. The National Registrar, Mr. A.W.
Graham, expressed one concern and that was how long the
members will be prepared to assist as discussion leaders
at sub-economic rates. Another problem is that long
distances in a state make it impossible to have fortnightly
sessions. The problem is overcome by having either
three sessions in one, or two-day sessions.

The practical-experience requirement for graduates and
diplomates of approved universities and colleges of...

22) Carrington, A.S., *Education for the Profession*, in a paper
contributed at the New Zealand Society of Accountants' 1970
Convention, Auckland, March 1970, published by the New Zealand
Society of Accountants, Wellington, pp.30/31.
advanced education is three years' employment with a chartered accountant in public practice, within a period of five years immediately prior to application for membership. Of the three years, not less than two years shall have been spent in continuous full-time employment.\(^{23}\)

Other applicants must have five years' employment with a chartered accountant within a period of eight years immediately prior to application. Of the five years, two shall be in continuous full-time employment.\(^{24}\)

It is significant to observe that The Institute has very little effective control over the quality of the experience gained by employees. The Registrar of The Institute states in this regard:

"While control is undoubtedly desirable, the practical problems of supervising it would be immense and we have not yet faced up to the problem, although we may do so if full integration of the profession is achieved ..." \(^{25}\)

Each partner is entitled to have ten students working for him. The control over the quality is rather ineffectual, but there are certain limitations on acceptability of service. One limitation is that the student must be under the direct control of a partner for more than six months of the year (this is to cover cases in which a student may be sent to outlying offices and receive unsatisfactory supervision). The Examination officer must be satisfied that satisfactory supervision over students is being maintained.

3.4 Educational Policy of the Australian Society of Accountants

The Australian Society has four classes of members:
Provisional, Associate, Senior Associate and Fellow.

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\(^{24}\) Loc. Cit., par.4.2.

\(^{25}\) The Australian Institute of Chartered Accountants, letter from the National Registrar, A.W. Graham, dated 18 December 1975.
The Provisional Member has the necessary qualification, but lacks the necessary practical experience. On completion of the practical-experience period he becomes an Associate Member. The classification Senior Associate arose when the Australasian Institute of Cost Accountants joined the Australian Society. An examination may be taken to qualify as a Senior Associate or alternatively a member must demonstrate that he has successfully completed a post graduate examination in a specialised subject with at least a 50% accounting content. The specialist directions are cost and management accounting, financial accounting, government accounting or accounting for public practice. The non-accounting content to make up the balance will include relevant studies in organisation theory, quantitative methods, business policy and philosophy, electronic data processing techniques, economic analysis and law.

The practical-experience requirement for a Provisional Member is three years in accountancy and/or finance under the supervision of a member of the Society of at least Associate status. There is no service contract, but on registration for Associate membership, the applicant must furnish documentary evidence of satisfactory experience of a specific nature certified by a member.

It is to be noted that the Australian Society of Accountants is phasing out its own examinations and is relying on recognised tertiary institutions to determine who has the necessary academic qualifications.

The Australian Society of Accountants has decided to introduce a Professional Orientation Year similar to the one introduced by The Institute of Chartered Accountants

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26) Australian Society of Accountants, Memorandum and Articles of Association, Melbourne, pp.11-14, clauses 7-10.
in Australia. The aims of the Professional Orientation Year are:

"a) To cultivate an awareness of the work situation of a professional accountant.
b) To inculcate a professional outlook.
c) To create an awareness of the Society's objectives.
d) To engender a desire to participate fully in the activities of the Society, particularly in professional development."^{29}

The programme will cover discussions both on ethical behaviour, and on professional development, and participants will be involved in practical applications of the work situation. Other topics to be covered will include communication, conference leadership, practical company secretarial practice, office organisation and internal audit, and discussion of problems in the application of accounting standards. The rules for attendance have not been finalised yet, but it is anticipated that there will be twenty sessions of two to three hours each, or alternatively, a concentrated six-day residential course for candidates staying in outlying areas.

The intended approach to the Professional Orientation Year of the Australian Society differs substantially from The Institute's approach because of the diverse nature of The Society's membership. Half of the discussion sessions will be devoted to common core topics, whereas the other half allows for areas of specialisation in the fields of public practice, commerce and industry and government.^{30}

It is not intended to set an examination at the end of the Professional Orientation Year. A candidate's performance during the year will be taken into account; it is therefore basically an attendance course. The


^{30} Australian Society of Accountants, letter from the Director Educational Facilities, R. Salmon, dated 22 December 1975.
lectures will be presented by members from the profession, from commerce and industry and from government departments. It is envisaged that the selection of session leaders may create a major problem.

Accreditation of universities and colleges of advanced education by the Australian Society of Accountants takes the following into account. A university or college must be funded by Commonwealth, and it must offer a three-year course on a full-time basis, or six years on a part-time basis, with an accounting major. The curriculum must cover subjects such as economics, business mathematics, organisation, systems analysis and business law. The only criterion given to the university is that the courses must give the student an understanding of the business environment; otherwise the development of courses is left entirely to universities who will develop their own fields of interest and emphasis. Another optional requirement is that the curriculum should include courses on auditing, income tax and business law. If a graduate has not completed these three subjects, he may do so during the practical experience period. Graduates from unrelated disciplines such as engineering and science will be expected to complete at least two years of full-time study, or its equivalent, in an approved course with an accounting major.31

The practical-experience requirements of the Australian Society are the same as those of The Institute. No specific guidelines are laid down with regard to the practical-experience requirement and the matter is left to the judgement of the Membership Committees. A wide range of practical-experience is acceptable in the fields of accounting and/or finance. Some guidelines have been given in the areas of teaching and banking. It is to be borne in mind that the members of the Australian Society are employed in many fields of interest with public

practice only accounting for 21% of its membership

The underlying philosophy of the educational policy of the Australian Society is basically very similar to that of The Institute of Chartered Accountants in Australia, both bodies relying to a large extent on tertiary institutions for the academic qualifications. It is wondered whether the introduction of the Professional Orientation Year by the Australian Society of Accountants is not political, as discussions are presently being held to investigate the possibility of a unified profession in Australia. The Professional Year of The Institute requires the successful completion of a final examination, which the Professional Orientation Year of the Australian Society will not require.

The Australian Society of Accountants provides for different tiers, namely: Provisional Associate (a graduate completing the experience requirement), Associate Member, a Fellow and Senior Associate. The latter qualification is attained either by examination or the completion of certain approved graduate courses at university.

The possibility is being examined of making attendance at professional development courses a condition of annual renewal as practising accountants. 32)

3.5 Institute of Affiliate Accountants 33)

The Institute of Affiliate Accountants was established in 1967, under the aegis of the Australian Society of Accountants as part of the development of a two-tier structure for accountancy education in Australia. (It is believed that seen in the context of the Australian Society

32) Ibid., p.20.

33) The information in this section is based on a publication of The Institute of Affiliate Accountants, Candidates Handbook, Melbourne, November 1974.
of Accountants the term two-tier structure may be inappropriate bearing in mind the classification of its members as Provisional, Associate, Senior Associate and Fellows). The Institute of Affiliate Accountants is given active support by The Institute of Chartered Accountants in Australia and the Australian Society of Accountants.34)

The underlying philosophy for the formation of The Institute of Affiliate Accountants is described as:

"The increasing complexity of business and the development of more sophisticated techniques in financial administration necessitated the introduction of higher educational standards for entry into the accountancy profession at full professional level.

Concurrent with this development, there arose a need to provide supporting qualifications for persons required to undertake a wide variety of tasks which do not demand the highly specialised knowledge of the professionally qualified accountant, but which nevertheless require a sound training in accounting procedures. ..."  

The main aims and objectives of the Institute are:

(i) To co-operate with the accountancy profession and the business community generally for the purpose of fostering and maintaining a body of qualified personnel skilled in accounting and related procedures;

(ii) To prescribe and adopt standards of attainments of members and for such purposes to conduct examinations in theory and practice of commercial subjects;

(iii) To actively promote the qualification of its members throughout the entire community for the purpose of gaining appropriate recognition and status for its members;

(iv) To protect the general interests of members and to provide them with appropriate services and facilities." 35)

The Institute does not provide tutorial groups, but sets the examinations only. It is also intended to phase out its own examinations and the major technical colleges of the State Education Departments will be entirely responsible for the education of Affiliate Accountants. Certain courses of technical colleges are already recognised and these qualifications are recognised by The Institute of Affiliate Accountants.

It is suggested that as The Institute functions as an adjunct to the accountancy profession, this ensures that high standards will be maintained and that the status of The Institute is enhanced, resulting in widespread employer acceptance of the membership qualification.

The main requirements for membership are passing prescribed examinations set or recognised by The Institute, being at least eighteen years of age, producing original testimonials as to character and attaining the necessary prescribed practical experience as determined by the General Council from time to time.\textsuperscript{36) } There are two classes of membership: Members (M.I.A.A.) and Honorary Members (Hon. M.I.A.A.). The distinction of Honorary Membership is conferred upon a person at the directive of the General Council in recognition of special services.\textsuperscript{37) } It is interesting to note that the General Council has the right to take disciplinary action against any member guilty of commercial misconduct or, in the opinion of the General Council, commits any action or carries on any business that may be inconsistent with his position as a member of The Institute.\textsuperscript{38) }

The entrance requirement is basically Matriculation with a pass in English. In some states the equivalent of Junior Matriculation would be acceptable. The courses

\textsuperscript{36) } Ibid., p.7.
\textsuperscript{37) } Loc. Cit.
\textsuperscript{38) } Ibid., p.8.
required for the qualification are:

Stage 1 - Group A - Bookkeeping
    Commercial Mathematics and Statistics
    Business Communication

Group B - Accounting Procedures I
    Business Law A
    Social and Economic Structure

Stage 11 - Group C - Accounting Procedures II A
    Business Law B
    Accounting Procedures II B
    Business Economics

Group D - Taxation Law
    Supervision
    Management Systems and Information Systems
    Costing Procedures. 39)

It may appear that the above-mentioned outline contains too much detail, but as interest has been expressed in the formation of a lower tier, it has been thought desirable to elucidate somewhat.

3.6 Accountancy Education and Training in New Zealand

The accountancy profession in New Zealand is possibly one of the few, if not the only one, that is a unified profession in the true sense, and has been so almost from its inception. The controlling body of the profession in New Zealand is the New Zealand Society of Accountants incorporated under an Act of Parliament in 1908 and presently incorporated under the New Zealand Society of Accountants Act, 1958.\(^{40}\)

Membership of the society is attained by a candidate successfully completing an examination and by fulfilling a practical-experience requirement. Co-operation between the New Zealand universities and the New Zealand Society of Accountants is very good and university courses are recognised for cross credits of the New Zealand Society of Accountants' examinations. A candidate who has completed a degree in commerce, or commerce and administration, or business studies, or management studies is entitled to cross credits from the degree course to the society's professional examination. Another way of obtaining the Society's qualification is by passing the ten subjects in the Society's professional examination. It could occur that a combination of the former two methods could be utilised to satisfy the examination requirement.\(^{41}\)

The entry requirement is basically the equivalent of a University Matriculation Pass and graduate entry is not a pre-requisite at this particular point in time. During 1971 a postal ballot was held to determine whether a graduate profession should be created, with the New Zealand Society of Accountants administering only a final examination for candidates who have already gained an approved degree. The proposal was rejected with 60% voting against it and 40% voting in favour of it.\(^{42}\) A change in the present policy is being discussed and


\(^{41}\) Loc. Cit.

the proposed changes are discussed below.

The professional examination of the New Zealand Society of Accountants consists of ten subjects and they are:

- Accounting I
- Commercial Law Part I
- Economics
- Quantitative methods
- Accounting II
- Commercial Law Part II
- Advanced Financial Accounting
- Taxation, Trustee Law and Accounts
- Cost and Management Accounting
- Auditing.

Examinations in all subjects consist of two papers with the exception of quantitative methods which consists of one paper. Detailed syllabi are prescribed for each subject. A pass in a single subject in any examination is credited. With regard to the final examination it is interesting to observe that when two papers are written the sub-minimum for one paper is 37%, whereas the aggregate for both papers must be 50% before a pass can be registered. Candidates are permitted, subject to certain conditions, to take approved copies of relevant statutes into the examination rooms with them. This is allowed for the examinations in certain subjects such as commercial law, accounting, auditing and papers in taxation, trustee law and accounts. The main condition is that certain approved statutes only (namely bound by government printer) may be taken into the examination room. No comments may be written in the book, but passages may be underlined. A student may apply for a re-examination of his scripts at a prescribed fee. The practical-experience requirements of the New Zealand Society of Accountants are different from those in many other countries, in that practical experience may be

44) Ibid., p.22.
gained with a chartered accountant in public practice, a government department, a bank, an insurance company or any other undertaking approved by the society.\textsuperscript{45}) Graduates are expected to complete a period of three years practical experience whereas matriculants must complete a period of five years.

The approach of the universities was generally very much professionally oriented, but radical changes have occurred at a few New Zealand universities and the approach is possibly more conceptually oriented. Interviews with academics in New Zealand indicate that they would prefer a more conceptually oriented approach to the teaching of accountancy students. They have expressed disappointment with the reaction of students to degrees based on a broader education and this is attributed to the fact that students enroll for subjects with will give them the greatest number of cross credit exemptions from the Society's examination. In an article on accountancy in New Zealand, B.G. Harrison refers to the question of the final qualifying examination and states in this regard:

"Hence, while academics wish to maintain and improve their contribution to the education of accountants, many of them would welcome a scheme under which the Society conducted its own final examination from which no exemptions would be granted. Scope would then exist for the development of more broadly-based courses of study in the universities."\textsuperscript{46})

It appears that the academics in New Zealand do have a certain amount of influence as the New Zealand Society is contemplating a change to its educational policy. The educational requirements for admission to membership of the Society are presently being reviewed and if the proposed policy is accepted, future members will be required either to have completed an approved university degree or

\textsuperscript{45}) \textit{Ibid.}, p.31.

an approved course of study at a technical institute and a uniform final examination controlled by the Society. If this policy is adopted it will result in the New Zealand Society of Accountants reducing its examination because instead of setting papers in ten subjects it will no doubt now set only three or possibly four examination papers for the qualifying examination.

There are no formal articles of clerkship or service contract and persons admitted to membership of the Society after 1971, who wish to offer accounting services to the public must have been members of the Society for not less than two years and completed not less than two and a half years acceptable experience in the office of a chartered accountant in public practice. The experience need not necessarily be gained after admission to the Society. 47)

Continuing education in New Zealand is not mandatory but an extensive continuing education programme is offered.

47) The New Zealand Society of Accountants, letter from the Assistant Secretary, dated 8 January 1976.
CHAPTER 4

ACCOUNTANCY EDUCATION AND TRAINING IN THE
UNITED STATES OF AMERICA

4.1 Introduction

Endeavours to generalise about accountancy education in the United States of America could best be described as an exercise in futility. The only uniformity one observes in the case of the American Institute of Certified Public Accountants is its Uniform CPA Examination. An examination of the requirements of the various states indicates considerable diversity in methods of education and training. The CPA - designation is granted by State Boards of Accountancy. The number of CPAs in all jurisdictions of the United States of America has been estimated at 150 000.\(^1\) Actual membership is presently estimated at 113 000.\(^2\) There is also a second public accountancy group known as "Public Accountants, PAs", whose licences are not dependent on the successful completion of professional examinations or specified education, but are based on broad requirements regarding the extent of an applicant's practice of accountancy.\(^3\) Many states no longer issue new licences for Public Accountants and of the forty states having legislation on Public Accountants, only fifteen still permit new registrations.\(^4\) There are numerous organisations of accountants in the United States of America and these are listed as: American Institute of Certified Public Accountants, The National Society of Public Accountants, American Accounting Association (consists mainly of accounting educators), The Institute of Internal Auditors, Financial Executives Institute, National Association of Accountants (mainly accountants with industrial and commercial companies)

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4) Ibid., pp.639/640.
and Federal Government Accountants Association. A trite observation, no doubt, is that the major accountancy body in the United States of America is the American Institute of Certified Public Accountants and discussions that follow will detail and examine the underlying philosophies of the educational and practical-experience policies of this Institute.

4.2 Educational Philosophy of the American Institute of Certified Public Accountants

In most states the present requirement for entry is a baccalaureate degree. Post-graduate education in public accounting is encouraged, devoted principally to accountancy and business administration, so that it will ultimately become a requirement for a CPA Certificate.

The present American philosophy of accountancy education is reflected in *Horizons for a Profession* which is now known as the *Horizons* study, as well as the Report of the Committee on Education and Experience Requirements for CPAs (Beamer Report).

These studies have been labelled as "Landmark studies of accounting education".

The Beamer Committee recommended resolutions for adoption by the American Institute of Certified Public Accountants as a substitute for the existing resolutions and the recommendations were adopted to become statements of Institute Policy. The full text of their


8) American Institute of Certified Public Accountants, Report of the Committee on Education and Experience Requirements for CPAs, New York, March 1969. The chairman of the Committee was Elmer G. Beamer and the report is often referred to as the Beamer Report.


recommendations reads:

"1. The CPA certificate is evidence of basic competence of professional quality in the discipline of accounting. This basic competence is demonstrated by acquiring the body of knowledge common to the profession and passing the CPA examination.

2. HORIZONS FOR A PROFESSION is authoritative for the purpose of delineating the common body of knowledge to be possessed by those about to begin their professional careers as CPAs.¹¹)

3. At least five years of college study are needed to obtain the common body of knowledge for CPAs and should be the education requirement. For those who meet this standard, no qualifying experience should be required.

4. The states should adopt this five-year requirement by 1975. Until it becomes effective, a transitional alternative is four years of college study and one year of qualifying experience.

5. The college study should be in programs comparable to those described in ACADEMIC PREPARATION FOR PROFESSIONAL ACCOUNTING CAREERS.¹²) The transitional qualifying experience should be in public practice or equivalent experience in industry, government, or college teaching acceptable to state boards of accountancy.

6. Candidates should be encouraged to take the CPA examination as soon as they have fulfilled education requirements and as close to their college graduation dates as possible. For those graduating in June, this may involve taking the May examination on a provisional basis.

7. Student internships are desirable and are encouraged as part of the educational program.

8. The REPORT OF THE STANDING COMMITTEE ON ACCOUNTING EDUCATION,¹³) which provides that the accreditation of academic programs is the responsibility of the academic community, is endorsed.


9. Educational programs must be flexible and adaptive and this is best achieved by entrusting their specific content to the academic community. However, the knowledge to be acquired and abilities to be developed through formal education for professional accounting are proper and continuing concerns of the AICPA.

10. The AICPA should review periodically the standards of admission requirements for CPAs." 14)

The motivation for regarding the CPA Certificate as evidence of basic competence of professional quality in the discipline of accounting is based on the following definition of the "discipline of Accounting":

"Accounting is a discipline which provides financial and other information essential to the efficient conduct and evaluation of the activities of any organization.

The information which accounting provides is essential for (1) effective planning, control and decision making by management, and (2) discharging the accountability of organizations to investors, creditors, government agencies, taxing authorities, association members, contributors to welfare institutions, and others.

Accounting includes the development and analysis of data, the testing of their validity and relevance, and the interpretation and communication of the resulting information to intended users. The data may be expressed in monetary or other quantitative terms, or in symbolic or verbal forms." 15)

From the abovementioned definition we see that the CPA certificate recognises not only the Certified Public Accountants in public practice, but also those outside public practice. The statistics of the American Institute of Certified Public Accountants show that there is a growing trend of Certified Public Accountants not in public practice. Statistics of membership of the American Institute of

14) Ibid., pp.6/7.

15) American Institute of Certified Public Accountants, "A Description of the Professional Practice of Certified Public Accountants", The Journal of Accountancy, December 1966, reproduced in the Beamer Report, Ibid., p.20. This was approved by the Council on 1 October 1966 as an official statement of the policy of the American Institute of Certified Public Accountants.
Certified Public Accountants at the end of 1972 reveal that 40.2% of members were not engaged in public practice. In 1960 and 1970 the figures were 31.2% and 38.4% respectively. It is presently estimated that 40% of members are not in public practice. Bearing in mind that many accountants, who have successfully completed the CPA examination, are not in public practice and have not registered as Certified Public Accountants, then the proportion of all Certified Public Accountants not in public practice is substantially greater.

4.3 Common Body of Knowledge

The common body of knowledge as delineated in Horizons for a Profession is regarded as being authoritative. A detailed common body of knowledge is not given in Horizons and reasons given by the authors are:

"Like others who have carried out studies of this kind, we do hope to stimulate progress. But we most assuredly do not wish to place upper bounds upon the possession or pursuit of knowledge by beginning CPAs, and prescriptive syllabi would be likely to do just that, to permit topical compliance at the possible cost of intellectual sterility. Too often floors become ceilings, too often learning lacks the depth we seek to portray here."

Great emphasis has been placed on a conceptual understanding in lieu of procedural skills. It is repeatedly stressed that it is more important for the prospective accountants to know why (that is understanding) he is doing something than how to do it. The latter can be accomplished fairly easily, but the former is much more difficult to impart and ascertain. In a summary of the common body of


20) Ibid., p.2.

21) Loc. Cit.
knowledge the authors again stress the importance of a conceptual approach and see accounting within a broad socio-economic environment, resulting in the common body of knowledge being of an interdisciplinary nature.\textsuperscript{22)} The authors see the qualities of the auditor as technical competence, independence and personal standards, knowledge that the rules of professional conduct are a philosophy and not a collection of rules.\textsuperscript{23)} Audit methodology should not be seen as programmes that can be committed to memory, but rather as a body of ideas that must be comprehended, so that the auditor is in a position to compile his own programme as and when the needs exist.\textsuperscript{24)} Much greater emphasis is placed on mathematics and statistics, as well as a basic knowledge of at least one computer system and at least one computer language.\textsuperscript{25)} A more intensive approach to the education of the future Certified Public Accountant will be required.

The authors of \textit{Horizons} state in this regard:

"Preparation for practice as a CPA has been characterized by rigor for many years; nevertheless this traditional rigor must be increased still further if CPAs are to provide the services to society which are likely to be expected of them. The advent of the computer, the development of sophisticated mathematical and statistical tools now applicable to problems in the world of affairs, and the promise of research in behavioral science make increased rigor mandatory if CPAs are to maintain a place in the sun." \textsuperscript{26)}

The recommendations made by Roy and MacNeill were exposed to the viewpoints of leading accounting educators and Certified Public Accountants at various seminars. The

\textsuperscript{22)} \textit{Ibid.}, pp.11/12.
\textsuperscript{23)} \textit{Ibid.}, p.12.
\textsuperscript{24)} \textit{Ibid.}, p.13.
\textsuperscript{25)} \textit{Loc. Cit.}
\textsuperscript{26)} \textit{Ibid.}, p.3.
findings of *Horizons* were generally favourably accepted, and four important themes, fundamental to *Horizons* emanated from the discussions.27) The four themes highlighted by the seminars were:

"1. For the CPA to be a professional, he must possess a number of inherent attributes plus requisite knowledge.

2. For the pre-professional, it is essential that continual emphasis be directed to conceptual understanding in preference to procedural skill.

3. Flexibility of mind must be developed to enable the individual to readily adapt to change.

4. Interdisciplinary knowledge is essential." 28)

Not all participants at seminars agreed with the de-emphasis of procedural skills and it appears that it is the degree of emphasis, rather than the substance which is questioned. The advocates of the conceptual approach affirm that it requires less time than the procedural approach, pointing out that skills are subject to rapid change whereas conceptual understanding is more enduring.

The role of the educationalist is to equip the student with a flexible mind and the ability to adapt to a changing environment. This role is necessary because of the uncertainty resulting from change. Discussions revealed that a general accounting education was preferable to a specialised accounting education. It was generally felt that specialisation in these fields could be left for post-qualification endeavours.29) Uniformity of approach to accounting education at universities and colleges is quite rightly discouraged. If all accountants had the same educational background, the profession would be most uninteresting and discussions among colleagues would no doubt reveal a dearth of ideas. Diversity of approach by universities can lead only to favourable cross-fertilisation of ideas, which must be beneficial to the profession in the long run.


28) Loc. Cit.

29) Loc. Cit.
Horizons requires a broad education, as the common body of knowledge refers to Humanities and Behavioural Science. The discussions at seminars on Horizons generally endorsed this view, the justification being the broadening scope of engagements undertaken by accountants. Thus the accountant must be able to understand the languages of the psychologist, personnel manager, systems analyst and other professionals. Another reason for this approach is that, as a member of a profession, an accountant must be able to get along and communicate with people. He must also be able to explain technical accounting terms to the layman. It is asserted a general education will assist the Certified Public Accountant to adapt more readily to environmental and technical changes during his lifetime.\textsuperscript{30}

Seminar discussions generally revealed that an educated Certified Public Accountant should be able to communicate effectively in writing and in speaking, should be equipped with tools and methods of analysis, and should be familiar with fundamental logic and rational thinking.\textsuperscript{31}

Horizons has stressed business education, and an analytical approach using case studies was suggested by participants at seminars. With regard to the teaching of accounting, participants generally expressed disappointment with text books.\textsuperscript{32}

An important aspect discussed at seminars was who was going to impart the necessary knowledge. On the one hand there are universities and colleges, and on the other the firms and professional organisations. How should the responsibilities be divided? At these seminars it was felt that if something could be taught more effectively outside the classroom it should obviously not be taught in the classroom. Subjects entailing detailed procedures such as auditing and taxation could be taught more effectively by firms.

\textsuperscript{30} Ibid., p.83.
\textsuperscript{31} Loc. Cit.
\textsuperscript{32} Loc. Cit.
Doyle Williams continues as follows:
"The role of the colleges and universities was seen as providing the tools for a student's becoming a professional accountant. That is, formal education should have as its responsibility the imbuing of a general education, imparting of a general knowledge of business and its environment, and instilling basic accounting theory and concepts ..., this view was not wholly accepted. The principal objection was that the emphasis on accounting was far too limited.

The essence of these discussions about the responsibility for the educational preparation of accountants seemed to be that much serious thought must be given to determining in a definitive manner the respective roles of the colleges and universities and the profession in sharing the responsibility for the initial education and training of professional accountants." 33)

Horizons has suggested much greater exposure to computers, at universities. This view was wholeheartedly endorsed by participants at seminars, and an integrated approach was suggested. Integrating computers into accounting courses would remove the fear that students and many accountants, for that matter, have of the computer. This greater emphasis on the computer will also no doubt stress the importance of the computer and its bearing on the accountant and its audit in the future. 34)

Horizons has been described as a "fountainhead of progress" for the education of accountants, and has assisted in stressing the joint responsibilities of educators and practitioners in preparing the future professional accountants. Many participants at these seminars indicated that because of the expanding technical body of knowledge, the firms will have to assume a greater share of the future training. 35)

33) Ibid., pp.83/84.
34) Ibid., p.84.
35) Loc. Cit.
4.4 Five Years of College Study - No Experience Requirement

The abovementioned recommendation made in the suggested resolutions of the Beamer Report, must have caused an uproar in professional circles. The Report indicates that 1975 was the target year for acceptance of this provision by most jurisdictions. 1976 witnesses no such achievement.

Various reasons are advanced for the recommendation of five years of college study and no experience requirements. These may be summarised as follows: 36) Study at college is regarded as the best means of obtaining the common body of knowledge as delineated by Horizons for a Profession. 37) The committee accepts the value of present-day (1969) experience requirements, because uniform standards cannot be set and policed. A stigma is attached to an experience requirement, because it implies apprenticeship, which is regarded as inappropriate for a learned profession. The Committee states further that the reduction and elimination of experience requirements is positive evidence of their ineffectiveness. There is no evidence that Certified Public Accountants in jurisdictions without the experience requirement have been guilty more often of contravening the rules of professional conduct for sub-standard practice than those with extensive experience. It is further felt that the fifth year of study would be very much more beneficial than one or two years experience as a junior staff member of a Certified Public Accountants firm.

Although it is admitted that appropriate experience may enhance certain qualities such as professionalism and technical competence, the attainment of breadth and depth of knowledge in a five-year college programme could not be obtained from a four-year programme and an experience requirement of one or two years. Two practical considerations are also mentioned: a Certified Public Accountant who wishes to practise independently will most probably

take a position with an established firm for a few years, and the time needed to pass all parts of the CPA examination will provide candidates with a period of practical experience.

4.5 Nature of College Study and Experience

A model curriculum\textsuperscript{38)} is given but not with the intention of being prescriptive or as a rigid curriculum for colleges, and definitely not as the basis of statutory regulation.\textsuperscript{39)}

A flexible and adaptive business and accounting education programme is required so that changes in business and in the accounting profession can be anticipated. These flexible and adaptive programmes it is averred:

"... is best achieved by entrusting their content to the academic community." \textsuperscript{40)}

Notwithstanding, the committee believes that the scope, purpose and general content of the formal education for professional accounting are proper concerns of the Institute.\textsuperscript{41)}

The one-year-experience requirement during the transitional period until acceptance of the five-year college, can be in public practice or in industry, government or college teaching of accounting. The latter is mentioned specifically as the teachers of accounting should be members of the profession.\textsuperscript{42)}

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\textsuperscript{38)} Committee on Education and Experience Requirements for Certified Public Accountants, Op. Cit., pp.41/59. (A brief description and outline of the curriculum is given).

\textsuperscript{39)} Ibid., pp.13/14.

\textsuperscript{40)} Ibid., p.7.

\textsuperscript{41)} Loc. Cit.

\textsuperscript{42)} Ibid., p.14.
The model alternative five- and four-year programmes are detailed below.\textsuperscript{43)}

### SUGGESTED PROGRAMMES IN ACCOUNTING

<table>
<thead>
<tr>
<th></th>
<th>Five-Year Programme</th>
<th>Four-Year Programme</th>
<th>% of responses indicating that content is about right. \textsuperscript{44)}</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Education (First Two Years)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>6 - 9</td>
<td>6 - 9</td>
<td>80</td>
</tr>
<tr>
<td>Behavioral Sciences</td>
<td>6</td>
<td>6</td>
<td>88</td>
</tr>
<tr>
<td>Economics</td>
<td>6</td>
<td>6</td>
<td>89</td>
</tr>
<tr>
<td>Elementary Accounting</td>
<td>3 - 6</td>
<td>3 - 6</td>
<td>96</td>
</tr>
<tr>
<td>Introduction to the</td>
<td>2 - 3</td>
<td>2 - 3</td>
<td>93</td>
</tr>
<tr>
<td>Computer Mathematics (modern algebra, calculus, statistics and probability)</td>
<td>12</td>
<td>12</td>
<td>78</td>
</tr>
<tr>
<td>Other general education</td>
<td>25 - 18</td>
<td>25 - 18</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>60</td>
<td>88</td>
</tr>
<tr>
<td><strong>General Business</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics (intermediate theory and the monetary system)</td>
<td>6</td>
<td>6</td>
<td>76</td>
</tr>
<tr>
<td>The Social environment of business</td>
<td>6</td>
<td>3</td>
<td>46</td>
</tr>
<tr>
<td>Business Law</td>
<td>6</td>
<td>4</td>
<td>79</td>
</tr>
<tr>
<td>Production or operational systems</td>
<td>3</td>
<td>2</td>
<td>91</td>
</tr>
<tr>
<td>Marketing</td>
<td>3</td>
<td>2</td>
<td>96</td>
</tr>
<tr>
<td>Finance</td>
<td>6</td>
<td>4</td>
<td>84</td>
</tr>
<tr>
<td>Organization, group and individual behaviour</td>
<td>9</td>
<td>6</td>
<td>43</td>
</tr>
<tr>
<td>Quantitative applications in business (optimization models, statistics, sampling, Markov chains, statistical decision theory queueing, PERT, simulation</td>
<td>9</td>
<td>6</td>
<td>58</td>
</tr>
<tr>
<td>Written communication</td>
<td>3</td>
<td>2</td>
<td>70</td>
</tr>
<tr>
<td>Business policy</td>
<td>3</td>
<td>3</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>54</td>
<td>38</td>
<td>79</td>
</tr>
</tbody>
</table>

\textsuperscript{43)} \textit{Ibid.}, p.58.

\textsuperscript{44)} "Committee to Examine the 1969 Report of AICPA Committee on Education and Experience Requirements for CPAs", supplement to Vol.47 of \textit{Accounting Review}, 1972, p.257. The respondents were requested to indicate whether recommendations were: "Not enough", "About right" or "Too much"; in view of the general acceptance, only the responses to "About right" are counted. The number of responses varied between 104 and...
Table:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Five-Year Programme</th>
<th>Four-Year Programme</th>
<th>% of responses indicating that content is about right</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial reporting theory</td>
<td>9</td>
<td>6</td>
<td>81</td>
</tr>
<tr>
<td>Applied financial accounting problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contemporary financial accounting issues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost determination and analysis</td>
<td>6</td>
<td>3</td>
<td>87</td>
</tr>
<tr>
<td>Cost control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost-based decision making</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax theory and considerations</td>
<td>3</td>
<td>3</td>
<td>56</td>
</tr>
<tr>
<td>Tax problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audit theory and philosophy</td>
<td>6</td>
<td>3</td>
<td>60</td>
</tr>
<tr>
<td>Audit problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computers and information systems in business</td>
<td>6</td>
<td>4</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>19</td>
<td>86</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
<td>3</td>
<td>74</td>
</tr>
<tr>
<td></td>
<td>150</td>
<td>120</td>
<td>86</td>
</tr>
</tbody>
</table>

Fifty-three percent and fifty-seven percent of the respondents indicated that six and nine semester hours for "The social environment of business" and "Organization, group and individual behaviour" respectively is too much. Forty-three percent of the respondents indicated that three semester hours for Tax theory and considerations and problems is too little.

A percental summary analysis of the two suggested programmes reflects the following:
<table>
<thead>
<tr>
<th>Course</th>
<th>Semester hours</th>
<th>Percentage</th>
<th>Semester hours</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>12</td>
<td>8.0</td>
<td>11</td>
<td>9.2</td>
</tr>
<tr>
<td>Economics</td>
<td>12</td>
<td>8.0</td>
<td>12</td>
<td>10.0</td>
</tr>
<tr>
<td>Elementary and financial accounting</td>
<td>15</td>
<td>10.0</td>
<td>12</td>
<td>10.0</td>
</tr>
<tr>
<td>Management accounting</td>
<td>6</td>
<td>4.0</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>Audit theory, philosophy and problems</td>
<td>6</td>
<td>4.0</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>Tax theory, considerations and problems</td>
<td>3</td>
<td>2.0</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>Computers and information systems</td>
<td>9</td>
<td>6.0</td>
<td>7</td>
<td>5.8</td>
</tr>
<tr>
<td>Mathematics and quantitative applications in business</td>
<td>21</td>
<td>14.0</td>
<td>18</td>
<td>15.0</td>
</tr>
<tr>
<td>Business law</td>
<td>6</td>
<td>4.0</td>
<td>4</td>
<td>3.3</td>
</tr>
<tr>
<td>General Business - production, marketing, finance and business policy and social environment of business</td>
<td>21</td>
<td>14.0</td>
<td>14</td>
<td>11.7</td>
</tr>
<tr>
<td>Behavioral sciences</td>
<td>15</td>
<td>10.0</td>
<td>12</td>
<td>10.0</td>
</tr>
<tr>
<td>Other general education</td>
<td>18</td>
<td>12.0</td>
<td>18</td>
<td>15.0</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
<td>4.0</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>150</strong></td>
<td><strong>100.0</strong></td>
<td><strong>120</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

As the five-year programme has not yet been widely accepted, and taking present economic considerations into account it is not likely to be accepted in the immediate short or medium term, a closer scrutiny of the four-year programme reveals that the professionally oriented subjects, including accounting, account for only 17.5% of the programme, with computers and mathematics totalling 20.8%. If the elective is utilized for auditing then professionally oriented subjects will account for only 20% of the programme. The abovementioned figures underline the importance of computer education and mathematics, statistics and quantitative techniques in the education of the American accountant of the future.

Although the Committee on Education and Experience Requirements for CPAs felt that a five-year programme is required to provide the optimal preparation for careers in accounting, they acknowledged that most students would settle for a four-year degree. The four-year programme should be the same in scope as the five-year programme but topics should not be treated in the same depth, and once again in the design of courses the preference of a conceptual understanding over manipulative skills is emphasized.45)

"If a trade-off is necessary, knowledge is to be preferred to technique." 46)

4.6 Time of Taking CPA Examination

Candidates are encouraged to sit for their CPA examinations as soon as they have fulfilled their educational requirements. It is stated that those candidates who pass the examination promptly, gain additional self-confidence and professional stature and they are in a position to concentrate on their professional progress as well as to continue their education. A candidate graduating in June is provisionally permitted to write in May when his academic knowledge is freshest and his talents to write examination papers at a peak. Results of these candidates are released only after presentation of evidence that they have completed the educational requirements.47)

Scrutinization of the Uniform CPA Examination reveals that it is designed mainly to test a candidate's conceptual understanding. Under these circumstances the timing of the examination may be appropriate, but the question arises whether a final professional examination of a professional institute should be conceptual. If it is believed that a final professional examination should test a candidate's knowledge of practical professional applications, then it is submitted that the timing would be incorrect. A discussion of the format of a final professional qualification examination is discussed elsewhere.48)

4.7 Student Internships

Student internships are regarded as very desirable and they should be encouraged as part of an educational

46) Ibid., p.59.
48) For a detailed discussion see pp.353/357.
programme as long as they are carefully planned. The internships make subsequent college study more meaningful.49)

4.8 Accreditation of Academic Programmes

Accreditation of academic programmes is done by the American Association of College School of Business (AACSB). In a report by the Standing Committee on Accounting Education of the American Institute of Certified Public Accountants, the accreditation of academic programmes was recognised as the responsibility of the academic community and it provides the means for evaluating accounting programmes.50) The necessity for a formal accreditation programme arises from the legal requirements of the various states that CPA examination candidates must have an acceptable degree with a major in accounting. The state boards of Accountancy do not have the staff, and universities would object to an uncontrolled growth of accreditation agencies.

The standards set for the accreditation of programmes in business administration (which includes accounting) by the American Association of College Schools of Business may be summarised as follows: To ensure sufficient breadth, 40% of a four-year programme must be outside the field of business and at least 40% must be in business, with the proviso that economics may be classified as fitting into either category. Adequate coverage of business is assured by the requirement that the field of business administration must include instruction in accounting, commercial law or legal environment of business, finance, management, marketing and statistics. The standards set do not refer only to academic content, but also deal with preparation of faculty, teaching loads, library and physical facilities.51) No rigid specifications or requirements are made for accreditation and are not based

49) Loc. Cit.


51) Loc. Cit.
on specification of course titles and hours because
"explicit standards tend to become a ceiling for excellence
rather than the floor it is intended to be." 52)

4.9 Review of Educational and Experience Requirements of
few States in the United States of America. 53)

As stated in the introductory paragraph generalisations about
accountancy education in the United States of America would
be an exercise in futility. It may however be fruitful to
review the requirements of a few of the most populous states
as well as one or two others.

The practical-experience requirement varies from no experience
in the State of West Virginia to as much as six years in the
State of Texas. A one-year experience requirement in the
State of Florida may be replaced by the successful completion
of an additional one-year course at an accredited college or
university. The entry requirement in Florida is the
completion of a four-year degree at an accredited college or
university with a major in accounting being mandatory. 54)
In the State of Texas a Bachelor's degree, conferred by an
accredited college or university with a major in accounting
as well as two years accounting experience approved by the
State Accountancy Board is required. Provision is made for
the graduate without the relevant courses. An alternative
is provided where sixty semester hours (two years) in any
field of study at a recognised college or university, and six
years of experience
"under the supervision of a Certified Public Accountant in work
of a non-routine nature, which continually requires independent
thought and judgement on important accounting matters." 55)

A candidate with a Master's degree majoring in accounting or
business administration need only complete one year's

52) Ibid., p.62.
53) The information in this section is based on a booklet, Provisions in
CPA Laws and Regulations, prepared by U.S. Army Audit Agency, in co-
operation with the American Institute of Certified Public Accountants,
Washington, July 1, 1972.
54) Ibid., pp.10/11.
55) Ibid., p.33.
practical experience.

In the State of New York the entry requirement is a four-year recognised degree with a two-year experience requirement or the completion of fifteen years' experience in an approved practice of public accounting. A Master's graduate need comply with only a one-year practical-experience requirement. In the State of Illinois a four-year degree or a course with a correspondence school specialising in business training is acceptable, if at least half the accounting courses are taught by Certified Public Accountants. A four-year university graduate need do only one year's practical experience. The successful completion of two years at a recognised college reduces the normal experience requirement of three years by one year. In the State of California the experience may be gained by doing government accounting or audit work, subject to approval by the State Accountancy Board. In the State of West Virginia no practical experience is required for applicants possessing a degree or certificate with a major in accounting, from an approved university or college.

All states referred to above require accounting study after high school, and all the states, with the exception of Illinois, require general education after high school. In all the states academic education may be a substitute for experience in varying degrees, depending on the academic qualification of the student.

The experience requirements are indicated in summary form below:

56) Ibid., pp.26/27.
57) Ibid., p.13.
58) Ibid., p.8.
59) Ibid., p.36.
<table>
<thead>
<tr>
<th>STATE</th>
<th>Mandatory</th>
<th>EXPERIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before Exam</td>
<td>Only Before Certificate</td>
</tr>
<tr>
<td>California</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Florida</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Illinois</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>New York</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Texas</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>West Virginia</td>
<td>No Experience Requirement</td>
<td></td>
</tr>
</tbody>
</table>

(a) A holder of a CPA certificate is not entitled to practise public accounting until he is registered as a public accountant.

(b) Candidates in the State of New York need no accounting experience to write the examinations in theory, law and problems, but before being allowed to write the auditing examination, two years' experience involving the diversified application of accounting principles and auditing procedures is required.

(c) A candidate in the State of Texas who has completed sixty hours at a recognised college, must complete the six-year practical-experience requirement before he may write the accounting practice examination. A candidate with a Bachelor's degree may write his examination without completing the experience requirement.

4.10 Uniform CPA Examination

A brief discussion of the purpose and general objectives is detailed below.

The purpose of the examination is described as:

"The Uniform CPA Examination is the primary means used by boards of accountancy to measure the technical competence of CPA candidates. To understand the importance of the examination as a prerequisite for the CPA certificate, one must

recognize the significance of the CPA certificate. It is awarded in the public interest to qualified candidates in accordance with the accountancy statutes of a given jurisdiction.

... The certificate is granted to assure the professional competence of individuals offering or intending to offer their services to the public as professional accountants; it is not granted for the benefit of those who possess the certificates or for any special group. The need for safeguarding the public interest, therefore, causes the boards of accountancy to investigate with meticulous care the qualifications of candidates for the CPA designation." 61)

The general objectives of the examination are stated as follows:

"The primary objective of the Uniform CPA Examination is to test the professional quality of the candidates' competence in the discipline of accounting. Such professional quality includes adequate technical knowledge, the ability to apply such knowledge skillfully and with good judgment, and an understanding of professional responsibility. Boards of accountancy may also rely upon means other than the CPA examination to assure that candidates possess the necessary technical and character attributes. Other sources include interviews, letters of reference, investigation of educational background, and affidavits of employment. In addition, many boards also test knowledge of their rules of professional conduct by administering an ethics examination." 62)

The booklet, Information for CPA Candidates contains invaluable information for the examination candidate. The examination time-table is indeed an arduous one as the sequence and times of the examination indicate below.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting Practice, Part I</td>
<td>Wednesday</td>
<td>1:30- 6:00P.M.</td>
</tr>
<tr>
<td>Auditing</td>
<td>Thursday</td>
<td>8:30-12:00Noon</td>
</tr>
<tr>
<td>Accounting Practice, Part II</td>
<td>Thursday</td>
<td>1:30- 6:00P.M.</td>
</tr>
<tr>
<td>Business (Commercial) Law</td>
<td>Friday</td>
<td>8:30-12:00Noon</td>
</tr>
<tr>
<td>Accounting Theory</td>
<td>Friday</td>
<td>1:30- 6:00P.M. 63)</td>
</tr>
</tbody>
</table>


62) Ibid., p.2.

63) Ibid., p.32.
A brief indication of what candidates may expect in the examination is:

"1. Accounting standards, concepts, postulates, and principles.
2. Generally accepted auditing standards, audit programs, and auditors’ reports.
3. Business organization and operation, including a knowledge of basic laws governing such organization and operation.
4. Use of accounting data for managerial purposes.
5. Quantitative methods and techniques as they apply to financial and managerial accounting and auditing.
6. Cost behavior, systems, and computer fundamentals.
7. Federal income taxation.
8. Accounting for governmental and not-for-profit organizations and related concepts, procedures, and reports.
10. Current professional literature and accounting issues receiving special attention at the time of the examination."  

Specialised and new topics for the examination may be tested by alternative or optional questions. An analysis of the examination papers reveals extensive use of multiple-choice questions. The use of multiple-choice questions is quite obvious when it is endeavoured to solve the logistical problem of approximately 38,000 candidates writing the examination.

Candidates are given an indication of the degrees of emphasis in each area and the candidates' knowledge of generally accepted auditing standards and procedures as they relate to the Certified Public Accountant's function in his examination of financial statements is tested. The paper covers the following: Statements on auditing standards, ethics and professional responsibilities, planning and control of the audit engagement, internal control concepts and procedures, auditing evidence.

64) Ibid., pp.2/3.
audit programmes and procedures, reviews of subsequent events, statistical sampling, auditor's report, current developments (controversies) in the profession and electronic data processing systems and computers.\footnote{65) Ibid., pp.5/8}

Testing in the area of electronic data processing and computers concentrates on the basic knowledge of the computer systems - its functions, general capabilities of the system, universal terms associated with computer. The candidate must be able to design, analyse and flowchart a system of modest complexity. He is also expected to have a general knowledge of the common commands used in computer languages sufficient to programme, debug and test a simple problem and he must have an understanding of the control and audit procedures and ability to use the computer in auditing.\footnote{66) Ibid., p.7.}

In the Accounting Theory Paper multiple-choice questions testing conceptual knowledge of accounting, and questions requiring essay answers will be set. The importance of reading current accounting journals is stressed. The Accounting Practice papers test the application of conceptual knowledge of accounting, by multiple-choice questions, and problems which may require preparation of various accounting entries, statements et al. This section includes Federal Income Taxes as well as applications of quantitative techniques. It is envisaged that the quantitative questions will become progressively more difficult and eventually they will test the knowledge of their applications for business in the following areas: Modern algebra (linear and nonlinear), calculus (differential and integral), probability and statistics and other mathematical techniques.\footnote{67) Ibid., pp.7/8.}

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\footnote{65) Ibid., pp.5/8}
\footnote{66) Ibid., p.7.}
\footnote{67) Ibid., pp.7/8.}
"Allocation of income taxes  
Analysis of financial statements  
Budgeting, forecasting and capital budgeting  
Business combinations – mergers and acquisitions  
Consolidated statements  
Corrections of accounts and financial statements  
Cost accounting – job order, process, standard, distribution, 
direct, etc.  
Federal income taxes  
Computation of estimated expenses and liability  
Difference between accounting principles and income tax 
rules  
Financial statements (including footnotes) for the going 
concern  
Statement of Financial Position (Balance Sheet)  
Earnings (Income) Statement and Statement of Retained Earnings  
Statement of Changes in Financial Position  
Fund accounting – municipal and other not-for-profit organizations  
Insurance  
Intangibles – valuation and amortization  
Inventories  
Investments  
Leases  
Liabilities  
Long-term contracts  
Multinational operations  
Owners’ equity  
Individuals  
Partnerships  
Corporations  
Pension costs  
Price-level adjustments  
Property, plant, and equipment – acquisition, valuation, depreciation, 
depletion, and disposal  
Quantitative methods and techniques, mathematics, statistics, 
and probability (applied to appropriate situations)  
Valuations – replacement costs, realizable values, market values."  

68) Ibid., pp.9/10.
The objective of the examination in Business (Commercial) law is to test a candidate's application of textbook knowledge to problems inherent in business transactions and the audit thereof. The examination is conceptual in approach, and candidates must be able to recognise the existence of a legal problem, be able to apply basic legal principles and be able to indicate the possible outcome of these applications. The topics covered by this section are: Accountants' legal responsibilities, antitrust, bankruptcy, commercial paper, contracts, Estates and trusts, Federal securities regulation, forms of business organisation, insurance, property, regulation of the employer and employee relationship, sales, secured transactions, suretyship.  

4.11 Grading of the CPA Examination

Grading bases are defined from an examination of a large sample of candidates' responses and not from the examiners' pre-conceived ideas as to what the responses should be. Uniformity of grading is attained by applying the defined grading bases as well as statistical controls. Marginal candidates' papers are reviewed four times. The development of the grading bases is based on an analysis of the drafts of the unofficial answers, which results in grading concepts. A grading concept is defined as "... the expression of an idea, thought, or opinion that can be clearly defined and identified." These grading bases are now used as a point of departure in the initial grading process. A large sample of candidates' answers is now examined and if these reveal additional acceptable concepts, they are incorporated as part of the answers. These revised grading bases are then applied to a sample of candidates' papers and the results are subjected to statistical analyses, which include item analyses and studies of grade correlations and grade distributions.

69) Ibid., pp.10/13.
70) Ibid., p.17.
71) Loc. Cit.
72) Loc. Cit.
The grading bases are revised again, taking into account the findings of the statistical analyses and these revised bases are applied to another sample, and subjected to further statistical analyses to determine that the bases are fair. Some minor modifications may be made to the grading bases. The papers used as part of the various samples are now included as part of the general population and will be graded in the normal sequence. There is no indication that the papers have been used as part of the original sample.  

Intensive analyses are also applied to the multiple-choice questions for the purpose of developing grading scales to convert candidates' raw scores to final grades. The validity of a multiple-choice question is reviewed if an alternative has been selected by a substantial proportion of the candidates. If the alternative is accepted, full credit is given.

No marks are indicated on the paper. A minimum and maximum completion time appears on the paper, and the point values assigned are approximately proportional to the minutes allotted for a question. The total points that can be attained in an answer exceed the point value and a ten-point question may be graded out of fifteen points. This factor, no doubt, influences the passing grade of seventy-five, which at first observation appears high, but a candidate need not provide all the concepts in an answer to attain a near maximum score.

Anonymity of candidates is preserved throughout the marking process. There is a grader for each question and in the Accounting Theory which may consist of five or six essays, there will therefore be five or six graders.

73) Ibid., p.18
74) Loc. Cit.
75) Loc. Cit.
The grading session lasts between six and seven weeks. Using one grader ensures uniformity of approach. The purpose of the first grading is to classify the papers into obvious passes, marginal and obvious failures.\(^{76}\) The second grading is done by reviewers and obvious passes and failures are subjected to a cursory review. After the second grading the grades are listed for each subject and compared with other subjects for consistency. If a graduate who passed two subjects attained a grade of sixty-nine in a third paper, this paper will be reviewed in the light of his possessing considerable competence and the grade may be raised to seventy-five. When a third grading does not result in the attainment of a pass, a fourth grading is applied by the director of examinations.\(^{77}\) The review of the whole paper is made bearing in mind whether the candidate has the competence to function effectively as a Certified Public Accountant. If the director feels the candidate has the competence, he passes. Only a very small number of candidates pass in this manner.\(^{78}\)

Examination statistics are not published by the American Institute of Certified Public Accountants as it is regarded as being a matter for the State Boards of Accountancy. A grade of seventy-five\(^{79}\) is required to pass a subject, but the provisions of the CPA examination vary from state to state. An examination of some of these provisions may be appropriate.

As observed above, the times of the examination appear to be arduous, but the regulations of most of the individual states do allow credits for the successful completion of subjects or the accounting practice papers.\(^{80}\) There are certain variations of this provision, such as in the case of the State of New York, where a pass in Accounting

\(^{76}\) Ibid., p.19.

\(^{77}\) Ibid., p.20.

\(^{78}\) Loc. Cit.

\(^{79}\) Ibid., p.19.

Practice and auditing, or any two, Group 1 subjects, which are Accounting Theory, Law, and Accounting Practice, is acceptable. If the Accounting Practice is the only Group 1 subject passed, the remaining two must be passed at a single sitting.\(^{81}\) Other provisions provide for passing either one or two subjects. Only four states provide for the passing of one subject. Other provisions include a sub-minimum which is mainly a grade of 50.

Credits are subject to limitations and these limitations reflect the disparity of the regulations pertaining to accountancy education in the United States of America. The most stringent provisions limit the life of credits to the next three successive examinations. The most liberal provision is for a period of five years.

In the State of Arizona provision is made for the candidate to furnish evidence of diligent study in failed subject/s. Certain minimum provisions are detailed. For example in the State of Alabama, a candidate who fails to attain an average grade of fifty with no grade over sixty, must wait one year before applying for re-examination.\(^{82}\)

The regulations in the State of Hawaii provide for an additional open book examination on Hawaii law and rules, after the successful completion of the Uniform CPA examination. A score of ninety-five must be attained in this examination before a certificate is issued.\(^{83}\)

In many states members of the bar are not required to take the Commercial law paper.

Diversity of approach emerges from the abovementioned description of the provisions applying to the various states, and endeavours to conceptualise reveal the following:

\[ \begin{align*}
\text{a)} & \quad \text{Although the passing grade of seventy-five is high, this is relative as the maximum marks are}
\end{align*} \]

\(^{81}\) Ibid., p.52.

\(^{82}\) Ibid., p.47.

\(^{83}\) Ibid., p.49.
in excess of one hundred percent and all the subjects do not have to be passed simultaneously.

b) Credits for subjects passed have a limited life.

c) If the performance of a candidate is very poor, evidence of subsequent satisfactory study is required before that candidate may sit for re-examination.

d) An open-book examination on regulations and ethics for the prospective practitioner is required in the State of Hawaii.

It is generally acknowledge that the Uniform CPA examination is a difficult examination to pass, and therefore various state societies organise programmes to assist candidates in their approach to the examination. In the state of Virginia one-day seminars are held as preview clinics, and some of the topics covered are: CPA Laws and regulations, when to take the examination, the changing nature of the examination, what materials to use in preparation for an examination, how the CPA examination is graded and predictions for the coming examination.84) As opposed to a one-day preview clinic, certain states organise coaching courses. In New York a four-day clinic is organised and each day is spent on a different section of the examination. These clinics refer to latest developments, suggested readings, latest examination trends, how to answer questions so as to attain maximum credit.85)

It is interesting to observe that a ranking of the accounting content of various professional examinations was done by two academics in the United States of America.86) Among the criteria used for the evaluation was the review of


85) Ibid., p.387.

prior examinations and solutions, (where available) as well as the levels of knowledge of accounting required by the respective institutes. The ranking according to the depth of knowledge tested, reveals the following order: Certificate in Management Accounting (CMA), Certified Internal Auditor (CIA), Certified Public Accountant (CPA), and Chartered Bank Auditor.  

The authors make the following observation:

"The proliferation of accounting certification programs offers opportunities for mature professionals as well as for younger accountants to achieve recognition of their professional competency in a highly technical discipline. Introduction and widespread acceptance of the CMA and CIA programs have enhanced the professional status of accountants whose expertise lie outside the public accounting field. The CPA designation is no longer the sole hallmark of accounting knowledge in this country."  

No doubt members of the American Institute of Certified Public Accountants will challenge the last statement on the grounds that the other programmes mentioned have only started their examinations quite recently. The authors point out that curricula at many universities have been designed for the requirements of public accounting only, in mind, but modifications are being implemented so that students with other interests, such as internal auditing, can be accommodated.  

4.12 Latest Developments in the United States of America

The Horizons study is still regarded as the common body of knowledge for Certified Public Accountants in the United States of America. It appears that the profession is having second thoughts about the conceptual approach in the generic courses, such as quantitative techniques and behavioural aspects of the suggested accounting programme. It is believed that these courses should

87) Ibid., p.105.
88) Ibid., p.107.
89) Loc. Cit.
be directed to an applied content that would be useful in practice. The Board on Standards for Programs and Schools of Professional Accounting of the American Institute of Certified Public Accountants is busy finalising a report, in which standards for identification of schools preparing students for the profession will be proposed. A task force has also been appointed to review the 1969 report of the Beamer Committee on Education and Experience Requirements. It appears that the procedural vis-a-vis conceptual approaches is causing controversy in America as well, and the task force is expected to concentrate on proposals which will result in a better balance in the educational curriculum between concepts and applications to practice in those situations where one aspect has seemed to dominate.\(^{90}\)

One of the most recent developments in America has been the publication of a *Model Accountancy Bill* by the American Institute of Certified Public Accountants. It appears that the object of the *Model Accountancy Bill* is to obviate the problem arising from the diversity of regulations which govern accountancy practices in the various states in America.\(^{91}\) Entry requirements are described in Section 4 of the *Model Accountancy Bill*, and, during a five-year period following the effective date of the Act, the educational requirement shall be a baccalaureate degree conferred by a recognised college or university with a concentration in accounting or a degree considered to be the equivalent of the foregoing. In the case of a non-relevant degree the accounting concentration will have to be supplemented.\(^{92}\) Section 2(2) indicates that after the expiration of the five-year period following the effective date of the Act, a baccalaureate degree conferred by a recognised college

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or university, and not less than thirty semester hours additional study, in a total education programme to include an accounting concentration or its equivalent in such related subjects as the Board, shall determine to be appropriate.  

An examination may be prescribed by the individual state boards that are entitled to utilise the Uniform Certified Public Accounting Examination of the American Institute of Certified Public Accountants. It appears, from comments in the draft bill, that a fifth year of study at a university is still recommended, and the curriculum as described in the Beamer Report, approximately 40% general education and 60% accounting, auditing, tax, computer systems, general business and similar subjects, is deemed desirable.

It appears that required continuing education is anticipated for all states as Section 12(b) refers to furnishing evidence every three years of attendance at courses as a condition of reregistration.

It is interesting to observe that the American Institute of Certified Public Accountants does not give a definite guideline with reference to the practical-experience requirement. Section 12(a) only states that holders of the Certified Public Accountants Certificate may be required to have practical experience, depending on the regulations of the Accountancy Board. The relevant section reads:

"... may be required as a condition of issuance of a permit pursuant to this section to demonstrate, in accordance with regulations issued by the Board, experience not to exceed ___ years in the practice of public accountancy or such other experience or employment as the Board in its discretion shall regard as substantially equivalent thereto."
There is very little control over the quality of experience gained by the prospective accountants in the offices of practising accountants in various states of America. It appears that State Boards only require a firm or practitioner to state that the candidate's experience has been in the auditing area for a specified period of time, depending on the legislative requirements of the individual states. 97)

In conclusion it may be stated that diversity of approach is the salient feature of accountancy education and training in the United States of America.

CHAPTER 5
ACCOUNTANCY EDUCATION AND TRAINING IN CANADA

5.1 Introduction

The main accountancy body is The Canadian Institute of Chartered Accountants, which is the federal controlling body. The provincial institutes have their own entrance regulations. On completion of the educational requirements of a province, a student then writes a uniform qualifying examination set by The Canadian Institute of Chartered Accountants. The educational requirements differ from one province to the next and reference will mainly be made to the province of Ontario.

5.2 The Institute of Chartered Accountants of Ontario

Graduate entry is a prerequisite for registration as a student and each student is required to complete forty-five semester hours of instruction at a university. The requirement is stated in semester hours and a one-semester university class meeting approximately three hours per week is the equivalent of three semester hours. It follows therefore that a two-semester course meeting approximately three hours per week would be the equivalent of six semester hours. The instruction required (with semester hours in brackets) is as follows: Financial Accounting (12), Management Accounting (6), Advanced Accounting Elective (3), Auditing (3), Taxation (3), Computer Science (3), Quantitative Methods (3), Finance (3), Economics (3), Law (3), and Management (3).

On completion of the forty-five semester-hours requirement, a student who has completed at least five months registered

1) The information in this section is taken from the Member's Handbook of The Institute of Chartered Accountants of Ontario, Regulations for Students, pp.409/416.
2) Ibid., p.413.
3) Ibid., p.414.
4) Ibid., p.413.
service may then attend the school of accountancy organised by The Institute of Chartered Accountants of Ontario. A further condition is that a student must demonstrate that he will have a minimum of one year's registered service by the date of the next Uniform Final Examination. If a candidate has passed the Uniform Final Examination and completed the practical-experience requirement, the CA designation is awarded.\textsuperscript{5)}

M.B.A. graduates, or other graduates of designated Canadian universities who have completed at least thirty-nine of the forty-five semester hours, are required to have two years' practical experience. Other graduates are expected to serve three years.\textsuperscript{6)} The regulations provide for the conditional registration of students without a university degree, as conditional students who are entitled to work for an approved firm full-time while studying for a degree part-time, so as to have their practical experience recognised. A further condition of such registration is provision of proof of registration at an university to take courses leading to a degree. On completion of the degree, the student completes the rest of the programme.\textsuperscript{7)} A conditional student is required to serve practical experience until a university degree is obtained, at which time an assessment of his practical experience served will be made, and a decision taken whether any further practical experience is required.\textsuperscript{8)}

Provision is also made for conditional registration of students enrolled at the University of Waterloo in a four-year Honours Co-operative Mathematics Programme for chartered accountancy students who are required to serve a minimum period of three years practical experience of which at least twelve months must follow the completion of the degree programme.\textsuperscript{9)} Students who are relatively strong in mathematics may enroll for this co-operative programme with the University of Waterloo and combine studies with work in order to achieve a Mathematics degree and a CA designation. The student attends class for four months and then works for four months and

\begin{itemize}
\item \textsuperscript{5)} \textit{Ibid.}, p.409.
\item \textsuperscript{6)} \textit{Ibid.}, p.412.
\item \textsuperscript{7)} \textit{Ibid.}, p.410.
\item \textsuperscript{8)} \textit{Ibid.}, p.412.
\item \textsuperscript{9)} \textit{Loc. Cit.}
\end{itemize}
this cycle continues until completion of the degree. On completion of the degree a student would have completed two years practical experience, and he is entitled to attend the school of accountancy and write the final examinations during his last year of practical experience.\(^{10}\)

Similar provisions apply to the McMaster Co-operative M.B.A. Programme, on completion of which a student would have completed twelve months of experience and would still have to complete a further eighteen months.\(^{11}\)

All registered students are expected to pass the examinations of the Ontario Institute School of Accountancy prior to writing the Uniform Final Examination. Lectures on advanced auditing and professional practice, advanced and specialised accounting and taxation are given at the school. Emphasis is on areas which a student would not have covered at university, as well as updating prior courses in regard to current developments. Emphasis is also placed on aspects of the professional practice of accounting which a student would be expected to have mastered by the time he qualifies as a chartered accountant. These include instilling a sense of professionalism and providing exposure to practical applications of theory and current developments.\(^{12}\) Students write tests and examinations at the school and if a student's performance is unsatisfactory he is not permitted to write the Uniform Final Examination. The failure rate during 1974 was 17%.\(^{13}\)

It is interesting to note that the school is not regarded as a "cram course" for examination preparation, nor a review programme for the Uniform Final Examination.\(^{14}\)

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\(^{10}\) Ibid., p.415.

\(^{11}\) Ibid., p.416.

\(^{12}\) Ibid., p.415.

\(^{13}\) The Institute of Chartered Accountants of Ontario, Letter to students, dated 15 January 1975.

\(^{14}\) Loc. Cit.
5.3 Co-operative Mathematics Programme at the University of Waterloo

The Waterloo programme is designed so that a graduate will have a degree in mathematics as well as having complied with the Ontario Institute's 45 semester hours of credits. At the completion of his degree the student will graduate either with a B.Maths. (Hons.) or B.Maths (General) and would have completed two of the three years of practical experience required in the province of Ontario. On completion of the Waterloo Co-operative Programme, the student is eligible to attend the Ontario Institute's School of Accountancy, and on completion of that school, he is entitled to sit for the Uniform Final Examination, which is within one year of graduation. The total time spent on the Waterloo programme from its commencement until receiving the CA designation is five years and eight months.

The underlying philosophy of the programme is based on the premise that the computer age has resulted in many sophisticated mathematical techniques being in common use in the business world as the fact is recognised that the chartered accountant in his daily routine also requires basic mathematical skills. It is stated in the brochure that in the future there will be many more complex business systems, and the CA mathematician will have a very important role to fulfill. It is stated that the student who can master a rigorous mathematics degree programme, will be in great demand because he will possess analytical capabilities coupled with the ability to use modern tools of business - the computer and other sophisticated aids to solve future complex problems of business. One of the advantages of the Waterloo programme is that the student is exposed to the practical environment at a very early

15) The information appearing in this section is based on an information brochure entitled, University of Waterloo - Co-operative Mathematics Program for Chartered Accountancy Candidates.
stage and it is stated that:

"This lends reality to the academic/work sequence and generally results in better career decisions by the student. As well, students have a better opportunity to develop an awareness of strengths and weaknesses in personal characteristics and work attitudes through continuing contact with the work environment."

Another advantage cited is that the student attains a certain degree of financial independence because of the remuneration he receives for the four-month period he is employed by a firm of chartered accountants. It may be observed that the remuneration paid varies between $90 and $120 per week during the first work term and could reach $200 per week by the sixth work term.

The diagramatic sequence of the academic work term appears below:

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>W</td>
<td>S</td>
<td>F</td>
<td>W</td>
</tr>
<tr>
<td>1A</td>
<td>1B</td>
<td>2A</td>
<td>2B</td>
<td>3A</td>
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F, W, and S denote fall, winter and spring terms respectively. ■■■ denotes work term.

Students enroll for a four-month academic term during September and commence their first four-month work term in January. Prior to the commencement of the work-term students complete the Ontario Institute's one-week training programme for new staff. Thereafter students continue the programme by alternating terms at university (the numbered squares) with firms of chartered accountants (the dark squares).

As the course is basically a mathematics course most of the subjects taught are mathematically oriented. Other prescribed subjects are: two semester courses in economics, introduction to financial accounting, theory of management, intermediate accounting I and II, commercial law, cost accounting, corporate finance, advanced accounting, personal and corporate income tax, as well as electives. The courses could be chosen in such a manner that on completion

16) Loc. Cit.
a student would have complied with the minimum requirements of the Institute of Chartered Accountants of Ontario. The diagramatic sequence above is not the only option open to students. Students have been able to arrange consecutive academic and/or work terms to allow for more desirable experience packages for the student and better utilisation of staff by accountancy firms. This is possible because there is a second academic/work-term sequence, similar to the one above, but with the eight-month academic term at the outset of the sequence instead of at the end. After having completed the programme a student will have to do only one additional year's practical experience to comply with the Institute's three-year practical-experience requirement. It is interesting to observe that if a student does not complete the programme, he receives no credit for any practical experience completed until terminating the course.

The admission requirements indicate that mathematical ability is essential as the total aggregate of the student must exceed 60% in grade 13 and an average of 66% is required in three major grade 13 mathematical courses, Relations and Functions, Calculus and Algebra. Grade 13 is the last year leading towards a secondary school graduation diploma.

Not all future chartered accountants can be expected to be proficient in the field of mathematics, but by the same token, there can be no doubt that the profession will require chartered accountants who have the necessary expertise in the fields of mathematics and statistics. In this respect it is commendable that certain universities concentrate on the mathematical and statistical aspects and at the same time afford a student the opportunity of completing the requisite accountancy subjects, which should entitle him to write the final qualifying examination. It appears that the philosophy of the Co-operative Mathematics Programme is very similar to the American philosophy in which the mathematical ability of the future chartered accountant is stressed.
The work sequence of the Co-operative M.B.A. work/study programme of McMaster University is as follows:

<table>
<thead>
<tr>
<th>FALL</th>
<th>WINTER</th>
<th>SUMMER</th>
<th>FALL</th>
<th>WINTER</th>
<th>SUMMER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept - Dec</td>
<td>Jan - Apr</td>
<td>May - Aug</td>
<td>Sept - Dec</td>
<td>Jan - Apr</td>
<td>May - Aug</td>
</tr>
<tr>
<td>Study</td>
<td>Work</td>
<td>Study</td>
<td>Work</td>
<td>Study</td>
<td>Work</td>
</tr>
</tbody>
</table>

A student commencing the programme in September of 1975 would complete it in December of 1977.

During the first year of study, the courses are stipulated and they are: financial accounting 1, managerial accounting 1, theory of income and employment, managerial economics, basic business finance, statistical analysis, marketing management, production management, determinants of behaviour and organisational behaviour. During the second year it is mandatory to take the courses in business policy, strategy formulation and management simulation and elective courses may be taken from the areas of accounting, economics, finance, industrial relations, marketing, international business and production and operations research, as well as business and its environment. There is a ruling that only five courses may be taken from any one section. The McMaster programme is very much more business and management oriented in its approach, and its course of study is designed for students to develop the habits and skills, the attitudes and understanding essential for the management of business and administrative affairs in the complex business world today.

Co-operative schools apparently commenced as far back as 1906, when the University of Cincinnati introduced a co-operative programme. In a comparison between the advantages of a co-operative system and

internships, Elmer G. Beamer states:
"Education under the co-operative system, in which work experience
is integrated with the curriculum, is more flexible than
internship in terms of timing." 18)

Academics in the co-operative field believe that this
approach has important advantages to the learning process
and improves techniques of teaching. In the co-operative
programme a student is required to observe, understand and
apply theory to actual practice. This approach, it
is stated, has a re-inforcing effect on the theoretical
knowledge and vice versa with the result that solid
learning is achieved. 19)

5.4 Entry Requirements - Rest of Canada

The Province of British Columbia has very stringent
entrance requirements in that a university degree, effectively
a B.Com. with sixty semester hours of specific courses is
required. The B.Com. degree takes five years to complete
at the University of British Columbia.

In the Provinces of Alberta, Saskatchewan and Malatoba
a university degree is a pre-requisite, but a specific
degree is not required. In the Province of Quebec
a B.Com. or equivalent is an entrance requirement.
A working knowledge of French, which is the first language
in the province of Quebec, is expected within one year of
acceptance.

Diversity of approach epitomises the Canadian attitude. In
British Columbia credits are given for courses completed
at universities and the province runs its own programme.

18) Ibid., p.72.
19) Ibid., p.73.
The Province of Alberta has a combination of institute and degree credit courses, but it appears that the institute courses are being gradually phased out. The attitude of the Province of Manitoba is similar to that of Alberta. In Saskatchewan degree credits are allowed on institute courses and supplementary special professional courses are provided by the Institute. The approach to accountancy education in the Province of Quebec is very similar to that in South Africa, in that the Institute courses are basically administered by the various universities in the province.

5.5 The Uniform Final Examination of The Canadian Institute of Chartered Accountants. 20)

One of the main purposes of the booklet, "Information for CA candidates on the Uniform Final Examination", is to counter the effects of certain mystique that has grown around the final examination, and has resulted in a form of folklore with comments such as: "Practically no-one passes the first time around", "the marking procedures are weighted in favour of certain provinces", and "the profession deliberately limits its growth so that CAs' earnings stay high". 21) The purpose of the booklet is to prove that these beliefs are fallacious, as strictly enforced anonymity of papers in the marking process ensures objectivity and excludes favouritism.

It is admitted that the Uniform Final Examination is not easy to pass and it should not be easy to pass, "because the profession must maintain the standards of competence which the public expects". 22)

20) The information in this section is taken mainly from a booklet, Information for CA Candidates on the Uniform Final Examination, prepared by the Inter-Provincial Education Committee of the provincial Institutes of Chartered Accountants in Canada, February 1975.
22) Loc. Cit.
As pointed out the admission requirements and educational standards for the provinces are controlled by the provinces and the Uniform Final Examination facilitates reciprocity between the various provinces. The justification for the Uniform Final Examination is also based on public interest as all chartered accountants in Canada have achieved a suitably high and uniform standard of competence at the time of qualification.

The syllabus of the Uniform Final Examination indicates the levels of knowledge required for various topics. Level one requires an appreciation of the nature and fundamentals involved; level two requires an understanding and application of aspects of practices and procedures, with additional research required to solve problems; level three requires an in-depth understanding of principles, practices and procedures and the application thereof without extensive recourse to technical research and assistance.  

The examination is set and marked by the Board of Examiners, which is a sub-committee of the Inter-Provincial Education Committee (IPEC). Each provincial institute nominates members for the Board of Examiners, but the chairman is appointed by IPEC. The Board of Examiners publishes an annual report analysing each year's results with comments and statistics and it is intended to assist educators in preparing future examination candidates. After the examination two booklets are published, namely "Final Examinations" and "Approaches to Answering the Uniform Final Examination".


Any chartered accountant may submit a problem with the suggested solution and marking key. The submitted questions are evaluated by a sub-committee and in determining whether a question is acceptable, care is taken to ensure that biased problems, or those problems requiring too high a degree of specialised skill or knowledge are avoided. 26)

When the Board of Examiners has set the examination papers, they are sent to provincial institutes where they are moderated. When the comments have been noted, the papers finalised and printed, the examination papers are sent to provincial institutes that organise their own centres, and invigilators for the days on which the examinations are written. After the examination has been written all papers are sent to Toronto for marking, with the exception of French answers to the comprehensive case study, which are marked in Montreal. When the marking is completed, provincial institutes receive and approve the results for distribution to their candidates. 27)

5.6 Format of the Uniform Final Examination

The format of the Uniform Final Examination has changed quite substantially. Prior to 1971, the examination

26) Ibid., p.10.
27) Ibid., pp.5/6.
consisted of three accounting papers of four hours each and three auditing papers of four hours each; a total of six papers and twenty-four hours of examinations. A pass in each subject was necessary to pass the examination, but if only one subject was passed, a supplementary examination could be written during the succeeding annual examination sittings.\textsuperscript{28)} The format of the new examination has changed and it is now split into four categories: comprehensive problem situations; multi-subject matter, single-subject matter and current literature. There is no longer a distinction between the accounting and auditing papers and the papers are now styled I, II, III and IV, with each one usually lasting four hours and making a total varying from fourteen to sixteen examination hours. The pass mark is 60%. No supplementary examinations are allowed and the whole examination has to be rewritten.\textsuperscript{29)}

A brief description of the four categories of problems follows below:

The comprehensive problem situation category embracing from two to five sections of the syllabus, requires candidates to recognise specific application of accounting concepts and information to solve business problems. Candidates are required to identify the central issues in the problems from information given, which contains irrelevancies. The candidate must be able to evaluate the legitimacy of the information. The wording indicating the requirements of the question is less directive than in other categories, but in this manner the candidate must be able to prove that he can solve a problem without being led.\textsuperscript{30)}

The multi-subject matter problems embracing four or five sections of the syllabus, do not contain irrelevant information and the requirements are more specific. Candidates must recognise the specific application/s

\begin{footnotes}
\item[28] \textit{Ibid.}, p.7.
\item[29] \textit{Loc. Cit.}
\end{footnotes}
of accounting concepts and information in solving business problems. Single-subject problems, as the name indicates, are generally restricted to one section of the syllabus and do not have irrelevant information and have highly directed requirements.\textsuperscript{31}

The rationale of including questions on current literature is to determine whether the candidate realises that education is a life-long process, and whether he displays a reasonable willingness to stay up-to-date with latest developments. Candidates are expected to read journals published within the two years prior to the examination date. The sources from which the questions may be drawn are the following:

(i) CA Magazine;
(ii) CICA Research Studies;
(iii) CICA Audit Technique Studies;
(iv) CICA Accounting Research Committee Exposure Drafts;
(v) CICA Auditing Standards Committee Exposure Drafts;

A choice of questions is offered where the topic is considered to be of a specialised nature.\textsuperscript{32}

In a discussion on the Uniform Final Examination, Michael Gibbins reveals why the changes were necessary.

"In former and perhaps simpler days, CA students studied according to programmes that were very similar from province to province and from year to year. Now, however, they follow many different educational programmes: there are differences in the number of courses, periods of practical experience, the order in which various subjects are taken, the actual content of subject area courses and the way the subject matter is taught. The changes in educational pattern meant that the Uniform Final

\textsuperscript{31} \textit{Ibid.}, p.8.
\textsuperscript{32} \textit{Loc. Cit.}
Examination also had to be changed, or it would get badly out of step with the knowledge students were acquiring.

The Examination did not change much from year to year, and so was perceived by some as actually having a negative effect on the profession's educational programmes. Because of human nature, educational programmes may tend to contain what is thought to be required to prepare students for the short-range objective of passing examinations rather than equipping them for a lifelong professional career. 33)

No doubt many South African academics will agree with these sentiments.

The comprehensive problem situation (known also as the case study approach) has caused some controversy in Canada. The opponents of this approach state that it is too difficult to set, the time and effort it takes to mark do not justify its inclusion in the examination, and it has caused the examination fees to escalate unduly.

A protagonist of the case study approach, L.S. Rosen, states:

"CA training must prepare a person to solve broad, financial problems. To do this he must be able to sort out the important from the unimportant in the context of a particular company, and know where to obtain answers to specific legal, accounting, auditing and ethical matters. Appropriate educational methods must therefore be adopted as early as possible because (1) such ability is not acquired overnight (as one writer stated: 'Because wisdom can't be told'), and (2) the initial educational approach should reflect for prospective accountants the nature of the work they will later perform."

He counters the argument about the difficulties involved in marking the answers as follows:

"The grading system just described is of necessity more subjective than the grading of questions asking for, say, journal entries. However, before criticizing the procedure, it is important to keep in mind the goal of the examinations and the degree of

subjectivity under discussion. To choose an extreme example, would you pay thousands of dollars for a course knowing that the final examination is going to ask you only to count a pile of dollar bills? The final examination would be very objectively graded. You either arrived at the same number as the examiners or you did not.

Like accounting, examinations have to be tailored - to fit the educational philosophy. A ten cent examination would be out of place at the end of a thousand dollar course. It is unlikely that you would readily accept the final examination which involved counting dollars. Nor would you be pleased if only one person read your response to a comprehensive case question and could pass or fail you. However, if three qualified accountants had to read your response and they had to agree on whether or not you 'missed the boat' you would likely accept the fairness of the examination. Thus, grading systems can be more equitable than the system which has only objective examination questions in a subjective world." 34)

In another article about the grading of such questions, L.S. Rosen states:

"... examination questions have to be viewed in a broader context than the ease and mythical objectivity with which they can be marked." 35)

A committee is presently evaluating the present type of comprehensive question in the examinations and its report is to be reviewed by the Inter-Provincial Education Committee. 36)


5.7 Structure and Marking of the Uniform Final Examination

The examination is marked out of four hundred marks and the division of marks among the categories is as follows:

<table>
<thead>
<tr>
<th>Problem Category</th>
<th>Range of Marks allocated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive Multi-Subject</td>
<td>80 - 100</td>
</tr>
<tr>
<td>Single-Subject</td>
<td>240 - 260</td>
</tr>
<tr>
<td>Current Literature</td>
<td>60</td>
</tr>
</tbody>
</table>

The marking procedures always give the benefit of the doubt to the examination candidate. Flexibility of approach to the marking is a feature, and valid variations to the answer are also included in the suggested solutions. Each answer is marked at least twice and as the marks are not indicated on the answers the second examiner thus does not know what the first examiner has awarded. Markers are constantly being evaluated for consistency of marking, and a supervisor maintains statistical checks on the distribution of marks for each problem. In the event of a candidate being a borderline case, that is, within a predetermined range below the pass mark, non-comprehensive papers are remarked by the original marker so as to ensure consistency.  

The comprehensive problem is marked on an area basis, depending on the nature of the problem set. Overmarking techniques are employed to allow for a variety of answers. The marking of these comprehensive problems requires the marker to use his own judgement, but great care is taken to avoid marker bias and subjectivity by having a learning period for test marking, with discussions and statistical monitoring of trends of each marker's mean and distribution. The comprehensive question is marked


by two independent markers and if not within an acceptable range of each other, the paper is remarked. When two marks are attained within an acceptable range of each other, the mean of these two marks is taken as being the final mark. It is to be borne in mind that the markers do not know what marks have been awarded by other markers. It is to be noted that comprehensive problems are not remarked in the case of borderline cases because of the multiple-marking approach used. Additions and transcription of marks are checked. An additional safeguard to ensure consistency is the marking of papers by the supervisor on a random basis.

The provincial institutes do permit applications for review (appeal) of examination results. These applications are forwarded to the Board of Examiners. The review procedures entail four levels of review, by supervisors who were in charge of the original marking to ensure consistency. The number of successful appeals is insignificant because of the detailed marking and control procedures adopted when the papers are marked originally.

Uniform Final Examination Statistics

Finalised pass percentages:

<table>
<thead>
<tr>
<th></th>
<th>All Writers</th>
<th>First-time writers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1969</td>
<td>49,5%</td>
<td>-</td>
</tr>
<tr>
<td>1970</td>
<td>50,1%</td>
<td>-</td>
</tr>
<tr>
<td>1971</td>
<td>53,3%</td>
<td>58,8%</td>
</tr>
<tr>
<td>1972</td>
<td>56,2%</td>
<td>61,6%</td>
</tr>
<tr>
<td>1973</td>
<td>50,1%</td>
<td>59,2%</td>
</tr>
<tr>
<td>1974</td>
<td>53,7%</td>
<td>-</td>
</tr>
<tr>
<td>1975</td>
<td>55,6%</td>
<td>-</td>
</tr>
</tbody>
</table>

39) Ibid., pp.17/18.
40) Ibid., pp.18/19.
The decline in the pass percentage for the 1973 year is attributed to a decline in the quality of the performance of candidates in the examination. The Board of Examiners states in this regard:

"This conclusion was reached after taking into consideration such matters as the changes in the nature of the examinations, level of difficulty of the examinations and the difficulty of marking. It would seem a reasonable hypothesis that the intellectual capabilities of 2500 candidates as a group should not change from year to year. If this is true, a possible conclusion might be that the programmes through which candidates are being prepared for the Uniform Final Examination are not responding to the changes in the examination." 42)

It is suggested that the introduction of the comprehensive question may have contributed to the decline. The 1974 pass percentage reflects a slight improvement as candidates were no doubt exposed to methods and techniques showing how they should approach comprehensive or case study questions. 1975 statistics reveal a further improvement.

An analysis of the statistics of the province of Ontario indicates that non-relevant graduates fared better than candidates with a Bachelor of Commerce / M.B.A. qualification.43)

The initial assessment of the required pass mark for successful completion of the Uniform Final Examination of the Canadian Institute of Chartered Accountants is that it is a high mark to attain. An investigation of the procedures indicates that a "raw mark" is converted to a "reported mark" and these "raw marks" can be less than the actual required 60%.

5.8 Conclusion

The salient feature of accountancy education in Canada, is no doubt their final examination, which is intended to be a difficult one. It is also causing its fair share of controversy because of the comprehensive or case study questions. Another feature is the involvement of the profession in block-release courses, which concentrate on the professional aspects of accountancy education.
CHAPTER 6

ACCOUNTANCY EDUCATION AND TRAINING IN EUROPE

6.1 Federal Republic of Germany - Introduction

There are basically two controlling bodies of the profession in the Federal Republic of Germany. Wirtschaftsprüferkammer (Chamber of Public Accountants)\(^1\) and the Institut der Wirtschaftsprüfer in Deutschland d.V. (Institute of Public Accountants). All practising accountants are required to be members of the former organisation, whereas membership of the latter is voluntary. Although membership of the Institut is voluntary, 90% of Wirtschaftsprüfer (accountants in public practice) belong to it.\(^2\) The Wirtschaftsprüferkammer is a federal regulatory body under the supervision of the Federal Ministry of Economics domiciled in Dusseldorf.\(^3\) (Its South African equivalent is the Public Accountants' and Auditors' Board). All Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (firms of Wirtschaftsprüfer) are members of the Wirtschaftsprüferkammer. The responsibilities of the "Chamber" are defined in federal law to regulate the profession (Wirtschaftsprüferordnung) and Section 57 reveals that the "Chamber" shall be responsible for looking after and furthering the interests of its members, and for advising them on matters of professional conduct. To achieve these objectives, the Wirtschaftsprüferkammer has authority to issue guidelines to members of the public; it also has a duty to supervise the professional activities of its members.\(^4\)

\(^{1}\) The English terminology in this section is as used in Professional Accounting in 30 Countries, American Institute of Certified Public Accountants, New York, 1975, pp.727/728.

\(^{2}\) Loc. Cit.

\(^{3}\) Education, Training and Examination Requirements for Admission to the Profession of Wirtschaftsprüfer in the Federal Republic of Germany, A study undertaken by the Anglo-German Liaison Committee of: The Institute of Chartered Accountants in England and Wales, Institut der Wirtschaftsprüfer in Deutschland e.V. Wirtschaftsprüferkammer;, 1975, p.1.

\(^{4}\) Ibid., p.2.
The *Institut der Wirtschaftsprüfer in Deutschland e.V.* has offices in Dusseldorf. (Its South African equivalent would be The National Council of Chartered Accountants (S.A.).) Its main function is to advance the technical interests of the profession and it makes recommendations to the authorities concerned with the legislation relating to taxation, company and other matters. Professional development and post-qualifying education is the responsibility of the *Institut*. Members of other associations involved in the audits of savings banks are extraordinary members of the *Institut*. Directors, managers and partners of *Wirtschaftsprüfungsgesellschaften* (firms of accountants) who are not *Wirtschaftsprüfer* are also extraordinary members.  

The following statistics relate to the profession in the Federal Republic of Germany:

<table>
<thead>
<tr>
<th>Year</th>
<th>1960</th>
<th>1970</th>
<th>1974</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of <em>Wirtschaftsprüfer</em></td>
<td>1517</td>
<td>2579</td>
<td>3087</td>
</tr>
<tr>
<td><em>Wirtschaftsprüfungsgesellschaften</em> (Firms)</td>
<td>176</td>
<td>281</td>
<td>425</td>
</tr>
</tbody>
</table>

*Steuerberater* are experts in tax law and practice, and approximately 75% of *Wirtschaftsprüfer* do this qualification first.  

Statistics revealing professional qualifications of *Wirtschaftsprüfer* on 31 December in years 1960, 1970 and 1974 were:

<table>
<thead>
<tr>
<th>Year</th>
<th>1960</th>
<th>1970</th>
<th>1974</th>
</tr>
</thead>
<tbody>
<tr>
<td>WP</td>
<td>692</td>
<td>1057</td>
<td>1183</td>
</tr>
<tr>
<td>WP/RA</td>
<td>17</td>
<td>46</td>
<td>55</td>
</tr>
<tr>
<td>WP/STB</td>
<td>794</td>
<td>1449</td>
<td>1782</td>
</tr>
<tr>
<td>WP/RA/STB</td>
<td>14</td>
<td>27</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>1517</td>
<td>2579</td>
<td>3087</td>
</tr>
</tbody>
</table>

WP = Wirtschaftsprüfer (Practising accountant)
RA = Rechtsanwalt (Lawyer)
STB = Steuerberater

The distribution of Wirtschaftsprüfer according to employment as at 31 December in the years 1960, 1970 and 1974 was:

<table>
<thead>
<tr>
<th></th>
<th>In own Practice</th>
<th>Employed in a Wirtschaftsprüfungsgesellschaft</th>
<th>Employed in a Firm specialising in the audit of co-operatives</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>840</td>
<td>608</td>
<td>58</td>
<td>1506</td>
</tr>
<tr>
<td>1970</td>
<td>1427</td>
<td>1072</td>
<td>80</td>
<td>2579</td>
</tr>
<tr>
<td>1974</td>
<td>1708</td>
<td>1283</td>
<td>96</td>
<td>3087</td>
</tr>
</tbody>
</table>

# Eleven members were temporarily absent, making a total of 1517. It is observed that a member who leaves the practising side of the profession is not permitted to retain his professional qualification of Wirtschaftsprüfer.

The number of practising accountants for an industrialised country such as the Federal Republic of Germany is surprisingly small and this may be because the qualification period is exceptionally long and few accountants qualify before the age of thirty-five. Statutory audits by Wirtschaftsprüfer are only applicable to joint stock companies, banks, insurance companies and certain other statutory bodies.  

6.2 Training Requirements

By statute a candidate for training in the profession is required to have a university degree in economics,

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8) Ibid., p.28.
9) Ibid., p.30.
political economy, law, engineering or agriculture. In theory all the degrees have equal status but because of the predominance of economics, taxation and commercial law in accountancy, approximately 75% have studied economics at university and the balance have degrees in political economy or law. Very few students with degrees in agriculture or engineering enter the profession. A non-graduate can be accepted as a student if he has had a minimum of ten years' experience in the profession. There are exceptions where the ten-year period may be reduced. No minimum age for admission has been laid down by law, but the requirement of a degree and six years' practical experience means that theoretically the earliest age at which one can qualify as a Wirtschaftsprüfer is thirty years, but in practice it works out closer to thirty-five years.

The relevant legislation does permit training on an apprenticeship basis, but the need for this has not arisen and there is generally no special contract between student and employer. As mentioned above the practical-experience period for a university graduate is six years, four of which must have been spent in auditing. Of the four years, a minimum of two must be spent in the office of a Wirtschaftsprüfer or with a firm specialising in the audits of co-operatives. Experience as an internal auditor or as a Steuerberater (tax expert) is considered equivalent to two years' auditing experience. Experience as an auditor in the public service is accepted provided the student can show that he has independently carried out audits of large organisations.

General auditing experience, other than the minimum of two years must be spent in a Wirtschaftsprüfer's office,  

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may be gained with members of the profession, which includes Steuerberater and another class of auditor, known as vereidigte Buchprüfer. The practical-experience period may be reduced if the student has undergone a commercial apprenticeship to become an accounting technician. Courses of study at a business school may be accorded full recognition if undertaken at the relevant time. Experience in a university department is recognised if there is a close relationship with the commercial world. The experience gained by students of the legal profession is recognised if it has a close connection with the commercial world. Thus legal experience gained in industry, government financial departments or taxation courts is also acceptable.\(^{17}\)

Candidates who have already taken the Steuerberater examination (and many do) are exempt from the examination in taxation law, and candidates who have had specific experience in the auditing of co-operatives can request to be examined specifically in this field. The Wirtschaftsprüfer qualification does not indicate the speciality and all members are entitled to do the audits of co-operatives.\(^{18}\)

It is not required to maintain a formal record of practical experience, but when a candidate applies for admission to the examination, he must submit two audit reports, as examples of his work. Legally, an employer must issue testimonials which cover the employee's work.\(^{19}\)

6.3 Theoretical Study

There are no formal guidelines or directives for a student to follow and no examinations are written during the six-year practical-experience period. The student must obviously direct his education in such a manner so that he will be able to pass the Wirtschaftsprüfer

examination. Private organisations do offer relevant courses.\textsuperscript{20} The Institut der Wirtschaftsprüfer in Deutschland e.V. in consultation with the Wirtschaftsprüferkammer organises a series of courses, which are designed to complement the students' practical experience. The courses are divided into four sections of 11\frac{1}{2} days each:

Section I : Current economic topics - 1 day
Management consultancy - 10\frac{1}{2} days

Section II : Aspects of civil law which relate to work of the Wirtschaftsprüfer - 11\frac{1}{2} days

Section III : Auditing (part 1) - 11\frac{1}{2} days

Section IV : Auditing (part 2) - 8 days
Trustee work - 2 days
Professional regulations - 1\frac{1}{2} days \textsuperscript{21}

Ten-day courses on electronic data processing and taxation are also available. During the practical-experience period a student may attend relevant courses at universities. The approach of the universities is mainly conceptual.

6.4 The Wirtschaftsprüfer Examinations

The purpose of the examination is described as being: "to discover whether the candidate has the necessary skill and personal character to equip him to undertake the professional work of a Wirtschaftsprüfer, particularly as far as statutory audits are concerned. The examination should allow the candidate to show that he is able to find a solution to professional problems which a Wirtschaftsprüfer would be likely to face, and to demonstrate that he understands the important points involved and the professional duties which arise therefrom. This means that the examination aims not so much to discover how much a candidate knows but rather to find out whether the candidate is capable of applying his knowledge." \textsuperscript{22}

\textsuperscript{20} Ibid., p.13.
\textsuperscript{21} Ibid., p.15.
\textsuperscript{22} Ibid., pp.16/17.
The examination consists of two parts, written and oral. The written examination consists of a thesis and three written papers. The thesis tests the ability of a candidate to do research on a specific subject. The candidate is given a choice of two subjects and has eight weeks in which to complete his thesis, the length of which varies from sixty to seventy typewritten pages. It is not limited to a prescribed number of words. Three, four to six-hour papers are written on three different days covering:

- Auditing and economics
- Company law
- Taxation.

In the oral examination the candidate has to speak briefly on one subject having been given a choice of three relating to professional practice as a Wirtschaftsprüfer. The subjects are given to the candidate half an hour before the examination. The length of the oral examination may not exceed two hours per candidate.

An "unsatisfactory" grading in the written papers results in the failure of a candidate. The paper on auditing and economics is of great importance and an unsatisfactory grading in this paper as well as one other, including the thesis, also results in failure. A candidate whose knowledge is regarded as unsatisfactory in certain subjects, but adequate in others may be referred in the unsatisfactory subjects. A candidate who has failed outright must submit a new application after one year.

6.5 Syllabus

As the approach to accountancy education and training in the Federal Republic of Germany differs so vastly from

23) Ibid., p.17.
24) Ibid., p.18.
26) Loc. Cit.
the Anglo-Saxon countries, a detailed syllabus of the examination subjects is set out below:

1. - Auditing and Economics
   
   (i) Auditing (including the auditing of co-operatives), principles of auditing, auditing and report-writing techniques
   
   (ii) Accounting and documents relating to annual accounts, including consolidated accounts, and relevant legislation
   
   (iii) Law regulating the profession
   
   (iv) Business economics
   
   (v) Cost accounting, accounting for annual results, statistics and budgeting
   
   (vi) Business finance and credit
   
   (vii) Capital and cash flow, and organisation of accounting systems
   
   (viii) Principles of economics and finance

2. - Company Law

   (i) Principles of civil law, with special reference to the law of credit and property
   
   (ii) Commercial law, with special consideration of the law affecting commercial companies and individuals
   
   (iii) Company law affecting capital and groups
   
   (iv) Law relating to co-operatives
   
   (v) Law relating to exchange and cheques
   
   (vi) Basic legislation relating to competition, premiums, rebates and monopolies
   
   (vii) Insolvency law and liquidations
   
   (viii) Principles of civil procedure, including distressants
   
   (ix) Principles of labour legislation, law relating to private insurance and social security, and the fixing of prices by public bodies

3. - Taxation

   (i) Regulation of taxes and duties, and related provisions
   
   (ii) Income tax and corporation tax
   
   (iii) Capital gains tax, property tax
   
   (iv) Turnover tax, tax on capital transactions
   
   (v) Principles of death duties and taxation of income from land. 27)

27) Ibid., pp.19/20.
Steuerberater (tax experts) who take the examination may be exempt from the written and oral examinations on taxation, if they so desire. This has a disadvantage as a good taxation result could now not be offset by less satisfactory results in other areas.

6.6 Examination Procedures

The Federal Republic of Germany consists of various Länder (states). Each Länder has its own Admissions Committee (Zulassungsausschuss), which consists of a representative of the Land Government (as chairman), three representatives from the business community and two Wirtschaftsprüfer. A reference (special report) from the student's employer and two audit reports as examples of the type of work performed by the student are submitted with the application form. The Admissions Committee normally seeks two other references as well. A candidate who has not been accepted for the examination may appeal to the courts. 28)

Each Länder may have its own Examination Committee (Prüfungsausschuss), but a few Länder have formed a joint committee, which consists of a representative from the Land Government (as chairman), a university professor of economics, a person qualified to serve as a judge, a representative of the Government taxation department, a representative from the business community and three Wirtschaftsprüfer. Responsibilities are allocated to members according to their specialities. The chairman is in charge of questions dealing with laws pertaining to the profession, the academic deals with questions on economics and political economy, the member who is qualified to serve as a judge deals with company law, management organisation questions are set by the business representative, questions on auditing and taxation are

28) Ibid., p.21.
respectively set by the two Wirtschaftsprüfer and the representative of the taxation department. The Examination Committee may seek assistance from outside in the setting of questions, such as the Wirtschaftsprüferkammer who assists with the topics for the thesis. 29)

As a uniform examination is not set for all the Länder it tends to vary from one Land to another, although there may be consultations between the various committees. The marking is done by the Examination Committee and every paper is marked independently by two members of the Education Committee. If there is a difference of not more than one grade, the average is taken. Where the difference is greater, the Examination Committee awards the final marks. 30) The oral examination concentrates on those gaps in the knowledge of a student exposed in his examination papers. A candidate is given the opportunity to explain certain answers. The examination is written in the Land where the candidate resides. Successful candidates, who number slightly in excess of two hundred per annum, are awarded a certificate. 31)

It may be of interest to point out that admission to the profession may be refused notwithstanding successful completion of the examination. The refusal may result from information acquired about a student's character, which would have justified his exclusion from the examination. Professional indemnity insurance is obligatory and on admission the student is required to take an oath.

29) Ibid., pp.22/23.
30) Ibid., p.23.
6.7 The Netherlands - Introduction

The accountancy profession in the Netherlands is controlled by the Nederlands Instituut van Registeraccountants which came about through the Registeraccountants Act which was promulgated during 1962 and took effect on 6 March 1967. Prior to the promulgation of this act any person could refer to himself as an accountant or auditor. The original controlling bodies of the profession in the Netherlands were: Nederlands Instituut van Accountants and the Vereniging van Academisch Gewormde Accountants, (Association of University-Trained Accountants) and Nederlandse Unie van Accountants. The first body was founded on 1 January 1895.

Of the 3,361 members of the Instituut on 1 September 1975 approximately 52% were not employed in the profession. At the time of the formation of the Instituut in 1967 about 2,400 accountants were registered in terms of the new act. The number of accountants qualifying in Holland through the Instituut course during the last five years varied between 112 and 134.

Statutory audits may be performed only by members of the Instituut, or by accountants who have qualified abroad, and who give proof of competency. They have to have authorisation from the Minister of Economic Affairs to carry out such audits. It is interesting to note that public companies have been required to have their financial statements audited only since 1972. This also applies to private companies whose balance...
sheets aggregate at least eight million Florins and who have more than one hundred employees. Companies with an issued share capital of 500000 Florins or more, banks and insurance companies, and companies that have bearer bonds outstanding must have statutory auditors. 40)

There are basically two ways in which an accountant may become a member of the Nederlands Instituut. The one way is by passing an accountants' examination at an approved university, of which there are five in the Netherlands. The second way is by attending courses organised by the Instituut. There has been close cooperation between the universities and the Instituut since 1915. 41) Uniform final examinations are set by a combined committee consisting of representatives of the universities and the Instituut. This examination is written at the universities as well as by the Instituut candidates. During a visit to the Netherlands, it was stated that certain academics had objections to a uniform examination, and the situation was being examined. At the time of the visit, practical experience was not a mandatory requirement and potential members of the Instituut are encouraged "to acquire a broadly based university degree in conjunction with a vocational apprenticeship in order that they may be professionally grounded in both theory and practice." 42)

The formal five-year university course in the Netherlands normally takes at least six years to complete. The examinations consist of four parts: the propaedeutical section; the general section; the optional section; and the final section. The propaedeutical section takes

40) Ibid., p.397.
one year and is followed by two years' study for a bachelor's course. A further period of study for two or three years results in the candidates having completed their doctorandus (drs.) degree. Subjects studied at university are general economics, statistics, business organisation, financial accounting, bookkeeping, fiscal law, study of banking systems and two optional subjects, for example, commercial and company law, information systems. After a candidate has completed his doctorandus degree, post-doctoral study entailing one day a week can be taken at universities and colleges over a period of two and a half years. During this period students work for practitioners. The post-doctoral study of accountancy includes the following subjects: a detailed and practically oriented study of business economics, information systems, internal controls and data processing, auditing, commercial and company law.

The Instituut organises its own courses which are concentrated on Fridays and Saturdays. Besides lectures, correspondence courses are provided for overseas students. The lectures are presented in twelve different towns in the Netherlands. The programme of the Instituut consists of four parts:

1. Propaedeutics - two years
2. General part - four years
3. Optional part - one and a half years
4. Final part

The propaedeutical section of the examination includes the following subjects: Law; general economics; mathematics; bookkeeping/statistics; and business economics I. 43)

The general section of the examination includes the following subjects: business economics II; tax law; organisation in general; administrative organisation including business information. 44)


A candidate may select one subject in the optional section from the following: business economics; organisation in general; administrative organisation including business information; mathematical methods for the preparation of decisions; tax law. The examination committee known as the *Onderwijs-en examenbureau* may obtain the consent of the Board of Governors of the *Instituut* to add subjects to those outlined above.\(^{45}\) The final section of the examination entails a study of the theory of auditing.\(^{46}\)

An analysis of the training schedule of the *Instituut* courses indicates that lectures totalling 1254 hours are necessary in the seven and a half years. A breakdown of the hours reveals the following percentages:

a) Law ........................................... 4,4%

b) Bookkeeping (techniques) ............... 5,6

c) Mathematics, applied mathematics and statistics ........................................... 11,5

d) Economics ........................................... 4,8

e) Business economics ......................... 19,8

f) Tax law ........................................... 5,2

g) Organisation, administrative organisation including business information .. 21,5

h) Optional subjects .............................. 11,6

i) Auditing theory ................................... 15,6

\[ 100,0\% \]  \(^{47}\)

An analysis of the above breakdown indicates that the approach of the Dutch is very much management oriented with business economics and administrative organisation (including business information) accounting for more than 40% of the total course time. Applied bookkeeping accounts for only 5,6% of the time, but in the subject, administrative organisation and business information, accounting topics are covered. It is interesting to

\(^{45}\) *Loc. Cit.*, Article 5.

\(^{46}\) *Loc. Cit.*, Article 6.

\(^{47}\) *Nederlands Instituut van Registeraccountants, Training Schedule NIVRA - education (New educational system)*. - Calculations made from this schedule.
observe that law accounts for only 4.4% of the total hours. This does not include taxation law which accounts for 5.2%. Auditing theory accounts for 15.6% of the total time.

An analysis of the detailed syllabus of business economics II reveals that the course is split into three sections, namely costing and cost price, with the main prescribed text book being Kosten en Kostepijs, by H.J. van de Skroef, the well known international work on costing. The second part of the course consists of theory of finance. The last part of the course consists of discussions on value and profit.

A review of the detailed syllabi of the NIVRA course leads to the conclusion that the Registeraccountant is very broadly educated, with an emphasis on management and business economics.

6.8 A Second Tier in the Netherlands

When the Registeraccountants Act came into force during March 1967, many accountants who were excluded from the register complained. This resulted in a parliamentary discussion which led to the undertaking that specific regulations allowing for the registration of such persons would be prepared. During January 1973 an act was approved creating and regulating a second tier. The act became operative on 1 February 1974 and those registered on the second register are known as Accountant-Administratieconsultent (Accounting consultant). These accountants will be organised in their own private organisation and the act governing the second tier lays down the professional knowledge and disciplinary rules. Needless to say that in drafting the relevant legislation the stumbling block was arriving at a clear definition of

49) Loc. Cit.
what the accounting consultants could and could not do. The final definition of what the accounting consultants may do is described as follows:

"In pursuance of a profession, involving one or more of the following activities:

(a) designing an efficacious accounting system, judging the manner in which accounts are being kept, or keeping a set of accounts; and

(b) giving, in an explanatory report, an analysis or interpretation of data derived from accounting documents, or giving, either orally or in writing information about, or advice based on such data." 50)

It is to be observed that only Registeraccountants, including approved foreign accountants, may express an opinion on the fairness of financial statements. A controversial aspect, whilst preparing the legislation, was whether persons working as internal auditors, not being Registeraccountants, could be entitled to issue reports. It concluded that an internal auditor, under such circumstances, be permitted to issue a report to his employer because the latter would be responsible for determining the adequacy of his proficiency level. A restriction was placed on the distribution of such reports which could be given only to his employer so that such a report should not create the impression that it was issued by someone acting in the capacity of auditor. 51)

6.9 Belgium

The accountancy profession in Belgium is controlled by the Collège National des Experts Comptables de Belgique (CNECB), which is not a statutory body. Statutory audits in Belgium can be performed only by members of the Institut

50) Loc. Cit.
51) Loc. Cit.
des Réviseurs d'Entreprises (IRE) which was established during 1953.\textsuperscript{52)}

To be accepted for training under the CNECB one must have a degree either in economics or finance, commerce or business, after completing four years' study at a university or institution of higher education. A degree or diploma in accountancy issued by a technical college is also sufficient.\textsuperscript{53)} It is interesting to note that to qualify for admission to membership of the CNECB, one must be thirty years of age.\textsuperscript{54)} Prior to a student being accepted for training by the CNECB, he is interviewed by a committee that has to approve his application. Testimonials are required indicating that the person is of good character and standing. The student is expected to give an undertaking that he will not only attend all lectures for students but also write all the tests set by the CNECB.\textsuperscript{55)} If a person does not comply with the entry requirements, namely a degree from a university or a diploma from a technical college, he may write an entrance examination which consists of a written eliminating examination followed by an oral examination. If the candidate is successful in the former, he is given an oral examination in which he is expected to have a knowledge of law, mathematics, general economics and business administration. In the written examination the candidate is expected to prepare financial statements.\textsuperscript{56)} The practical-experience period is five years, except for persons over the age of thirty, who are expected to do a three-year practical-experience period. Practical experience may be gained under a contract of employment in an industrial or commercial enterprise, by setting up as an independent accountant, or by working for his maître de stage (an expert comptable entrusted with his training). It is to be observed that the whole period of practical experience is to be under the supervision

\textsuperscript{52)} Anglo-Belgian Liaison Committee, Education, training and examination requirements for admission to the profession of experts comptables (CNECB) in Belgium, a study undertaken by the Anglo-Belgian Liaison Committee of the Institute of Chartered Accountants in England and Wales, College National des Experts Comptables de Belgique, and Institut des Réviseurs d'Entreprises, pp.1/2.

\textsuperscript{53)} Ibid., p.2.

\textsuperscript{54)} Ibid., p.3.

\textsuperscript{55)} Ibid., pp.3/4.

\textsuperscript{56)} Ibid., p.4.
of a maître de stage, who must be a member of the CNECB. The student is expected to prepare a detailed report annually on his studies and practical work. The CNECB provides courses during the practical-experience period, and attendance at such lectures is compulsory.

Examinations, consisting of two parts are written annually. A written paper is completed by the student at home, and a subsequent oral examination, based on the written paper, is held. It is interesting to note that the second year examination is an eliminating examination in which those candidates, who, in the opinion of the Examination Commission, do not have the necessary professional qualifications for becoming an Expert Comptable are eliminated. These students are allowed a further attempt to pass this examination. The final examination, which may be written only after completion of the practical-experience period and within three years of such period, consists of a thesis, which normally entails the analysis of the finances and accounts of a company. There is no detailed syllabus and the subjects for examinations vary depending on the courses the student has attended.

The membership of the two institutes at 31 December 1973 totaled 227 Reviseurs d'Entreprises and 1523 Experts Comptables.

6.10 Denmark

The profession in Denmark which is controlled by a voluntary body representing almost all state authorized accountants is known as the Foreningen of Statsautoriserede Revisorer.

57) Ibid., pp.5/6.
58) Ibid., p.8.
59) Ibid., p.10.
60) Ibid., p.12.
61) Ibid., p.13.
According to Professional Accounting in 30 Countries the pre-requisites for the final examination are as follows:

1) a bachelor's degree in economics;
2) master's degree in auditing;
3) completion of a practical-experience period in the office of a state authorised public accountant for three years.

The candidate is expected to attend lectures during the period in the following:

a) Propaedeutics (foreign languages, bookkeeping, mathematics)

b) The humanities

c) Economics, (macro- and micro-, including accountancy and information theory and so forth)

b) Statistics

e) Auditing theory

f) Civil law and company law

g) Taxation

h) Bankruptcy. 64)

These courses are held on a block-release basis and six three-day presentations are held. Accountants usually qualify when they are between twenty-eight and thirty years old. 65)

6.11 France

The accounting profession in France is controlled by L'Ordre des Experts Comptables et des Comptables Agréés. 66) A three-year practical-experience period is required and Lafferty states that 75% of students hold university

64) Ibid., pp.170/171.


degrees or college diplomas after attending four years of studies. They who do not have a degree or diploma are required to take an entrance examination.

During the practical-experience period, trainee accountants (Stagaires) have to write two examinations, the first of which is written after one year and in the case of graduates it could be sooner. Depending on their subjects, graduates may be exempt from this examination, which includes both written and oral examinations on financial and management accounting, mercantile, industrial and company law, and economics. The second examination, taken at the end of the practical-experience period, consists of a paper on auditing, and another on one of the following subjects: law or taxation, organisation and management, and international relations, including knowledge of an overseas language. A thesis must also be submitted.

The minimum age for entry to the profession is twenty-five but few qualify before the age of thirty.

The value of the practical-experience period in France is questioned by Lafferty, who asserts that the auditing standards are poor. He further states that there are very few large firms practising auditing in France. Only Experts Comptables in public practice are entitled to membership of the Ordre. The member forfeits his membership when he enters industry or commerce. At 30 September 1973 there were 3739 Experts Comptables.

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68) Loc. Cit.
69) Loc. Cit.
70) Ibid., p.35.
6.12 Italy

It appears according to Lafferty, that the standard of education of accountants in Italy is very low.\footnote{Ibid., p.36.} It appears that because the Italian business environment leaves much to be desired, this has detrimentally affected the development of the accountancy profession. Accountants in Italy are preoccupied mainly with fiscal matters so that auditing does not play a very important role.\footnote{Loc. Cit.}

There are two controlling bodies of the accountancy profession, Ordine dei Dottori Commerciali, which is the senior body and the Collegio dei Ragionieri e Periti Commerciali. To be accepted by the Ordine the student requires a university degree which entails written examinations in economics, accounting, banking, public, civil and commercial law, mathematics and statistics, and two foreign languages, and an oral examination. A thesis is required and thereafter a student must pass a state examination covering accounting, banking, taxation and commercial law. There is no practical-experience requirement for this qualification.\footnote{Loc. Cit.}

To qualify for membership of the Collegio the student must complete a five-year course at a technical school, obtain two years' practical experience with a ragioniere, and pass a professional examination in accounting, company law and taxation.
CHAPTER 7

ACCOUNTANCY EDUCATION AND TRAINING IN

ENGLAND, WALES AND SCOTLAND

7.1 The Institute of Chartered Accountants in England and Wales - Introduction

The Institute of Chartered Accountants in England and Wales is one of the largest accountancy bodies in the world. A breakdown of its membership statistics as at 14 November 1975 (including December 1975 admissions) reveals the following:

<table>
<thead>
<tr>
<th></th>
<th>U.K.</th>
<th>Overseas</th>
<th>Retired</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>In practice</td>
<td>14,635</td>
<td>1,455</td>
<td>-</td>
<td>16,090</td>
</tr>
<tr>
<td>Not in practice</td>
<td>33,610</td>
<td>7,214</td>
<td>-</td>
<td>40,824</td>
</tr>
<tr>
<td>Retired</td>
<td>-</td>
<td>-</td>
<td>4,823</td>
<td>4,823</td>
</tr>
<tr>
<td></td>
<td>48,245</td>
<td>8,669</td>
<td>4,823</td>
<td>61,737</td>
</tr>
</tbody>
</table>

Accountants are generally known to be very conservative, and this conservatism is no doubt reflected by the slackness in which changes have been brought about in the approaches to accountancy education. The changes to accountancy education in the United Kingdom, more specifically England and Wales, have come about very slowly. In an article, W.T. Baxter regards the fifties as the watershed in accountancy education in England and Wales.2) Baxter continues that influential journals, such as The Economist, have made scathing criticism of accountancy education. The profession at the time enjoyed unknown prestige as many new specialised areas were opened to the profession. The demand for services increased with new developments in budgeting, with decision-making regarding capital budgeting, with the development of the computer and with statisticians developing modern techniques. Baxter regards the training received during the fifties as having a medieval flavour and being unattractive to high-school graduates.

1) The Institute of Chartered Accountants in England and Wales, letter from the Assistant Secretary, B.W. Frost, dated 30 December 1975.

The approach to accountancy education underwent radical change during 1972. Accounting as an academic discipline did not emerge in England to any great extent until the sixties, which slowly but surely saw the creation of additional chairs of accounting. Most chairs of accounting were created after 1969. The dearth of chairs in accounting could possibly be ascribed to the attitude of the Council of The Institute of Chartered Accountants in England and Wales. According to Baxter, the Council set up a committee during 1958 to consider its own education and training, and the findings showed it preferred "the office stool to the classroom desk, and declined to contemplate 'any radical change in existing arrangements'". 3) The major changes came with the publication during May 1972 of A Policy for Education and Training.

A brief outline of the educational requirements appears below. Non-graduates require the equivalent of a university pass and are required to attend a compulsory foundation course on a full-time basis for one academic year. The Council of The Institute does not contemplate making a degree a pre-requisite prior to the training period, as it recognises the importance of adequate opportunity for the non-graduate to qualify as a chartered accountant. 4)

At a recent symposium it was reported that in 1974, for the first time, more than half of the service contracts registered were those of graduates. 5) At the symposium the view was expressed that graduate entry should be evolutionary and not be made compulsory by decree. It was felt that if the quality of entrants to the profession was to improve, graduate entry was desirable. Another suggestion was made that a degree could be attained part-time whilst the student was undergoing practical experience.

The non-graduate attends the Foundation course at a selected college and the purpose of the course is described as follows:

"The object of this foundation course is to give the student

3) Ibid., p.74.
an introduction to the fundamental principles and techniques used by all accountants and to the basic concepts of the modern audit, combined with an understanding of the economic and legal environment in which accountancy is practised, the language, concepts and methods of reasoning needed in studying the literature of modern financial management, and the principles of statistical methods used in management and accountancy. The course will terminate in an examination set by the college in consultation with an external examiner and/or assessor approved by the Institute." 6)

The practical-experience requirement for the non-graduate is four years and the time spent on the Foundation course does not count as part of the practical experience period. The regulations do permit the training contract to commence prior to the foundation course, subject to the proviso that only six months experience will be accepted as valid service towards the four-year requirement. Periods of less than two months will not be recognised.

It is of interest that no uniform syllabus or uniform examination is contemplated at the end of the course because such a requirement would stultify growth and development. 7) It further states that change and progress are more likely where there is freedom to experiment. There will still be dialogue between the Institute and the colleges, and the Institute will approve external examiners or assessors of full-time courses at colleges.

Graduates of universities in the British Isles have to complete a three-year practical-experience period and the recruitment of graduates is being encouraged. This trend is revealed by statistics, quoted by Baxter, which indicate that during 1969 of a total intake of

7) Ibid., p.8. par.IX
4232, only 814 were graduates, representing 19.2\% of the total intake. The 1972 statistics reveal an intake of 1702 graduates out of a total of 5565, representing a graduate intake of 30.6\%. During 1974 the graduate intake was 2261 out of a total intake of 4151, representing 54.5\% of the total intake.\textsuperscript{8)}

Graduates with relevant degrees will not be required to attend a foundation course, and will be exempted from one or more of the four papers in the Institute's Foundation Examinations. Those graduates who are not granted full exemption will be expected to write appropriate papers in the examination, or alternatively to attend conversion courses at universities or colleges. It appears that the provision of conversion courses is causing problems. Graduates with non-relevant degrees can prepare for the foundation examination by private study, which could include a correspondence course.

Training experience for the future accountant is regarded as essential as it provides a broad base for the future development of members. Free transferability of training contracts is regarded as being unacceptable. A member wishing to train students must seek the consent of the Council through the Board of Accreditation of Authorised Principals. It is interesting that the applicant is interviewed by a special panel which, inter alia, must satisfy itself that the student will receive an adequate range of work experience particularly in the core areas of accounting, auditing and taxation.

The Board of Accreditation has encountered certain problems, such as the lack of consistency between areas and between panels within a district. Accreditation has been required since 1963 and was changed in 1972 requiring the interviews as referred to above. Many principals held accreditation prior to 1963 and the Accreditation Board believed although the majority did a good job,

there was a reservation that a minority would still exploit students.\textsuperscript{9)\textdagger} The approval of the firms, that are regarded as suitable for the training of future accountants, has caused a great controversy.

\textquote{"It appeared that the Institute accepted that a smaller firm must be the one which suffered. Was the Institute, in fact accepting that the training was the responsibility of the larger firms?"} \textsuperscript{10)}

It appears that the provision allowing a student a certain portion of his training period in industry, has not been very successful and has not been used to a large extent.

A training record is required to be kept, and it is the principal's role to monitor the student's progress, to complete the appropriate report at regular intervals. The principal must ensure that the training record maintained by the student is a meaningful record of his experience, both as material for review and training sessions with a principal, and for eventual appraisal by the Institute. The principal is also required to certify to the Institute, when a student applies for membership, that the student has received suitable experience in order to practise accountancy and taxation, and is regarded as a fit and proper person to become a member of the Institute.\textsuperscript{11)}

The associateship of the Institute is to be regarded as the attainment of a sound knowledge of fundamentals. The increasing complexity of the chartered accountant's work is seen as justification for extending the practical-experience required before being entitled to a practising certificate. Two years post-qualification approved experience will be required before a practising certificate is issued to an associate member.

The attainment of fellowship of the Institute of England and Wales will be attained by successfully completing an examination. The examination will consist of one

\textsuperscript{9)\textdagger\textquote{In the News - Board of Accreditation gets down to Work", Accountancy, December 1974.}}

\textsuperscript{10)\textquote{Loc. Cit.}}

\textsuperscript{11)\textquote{Letter from the Assistant-Secretary, Op. Cit.}}
general and three specialist papers with evidence of adequate relevant experience. This arrangement applies to members to be admitted after June 1978. The fields of specialist areas to be introduced are: taxation, accounting, auditing and investigations, management information systems, data processing and management mathematics, financial management, planning and control. The tests will apply to specialist as well as general practitioners, whether in practice or in industry/commerce.  

The Institute approves of "sandwich courses" that are professionally relevant and will allow experience obtained under such arrangements to rank as recognised practical experience.

7.2 Professional Examinations

Examinations are regarded as part of the educational process, and should be designed to test how far the process has succeeded in producing a student suitably equipped with the basic knowledge and with sufficient flexibility of mind to enable him to adapt to a changing environment throughout his career. The raising of the entry standards and the provision for attendance at a foundation course should enable the student to undergo education in greater depth and challenge his intellect. The requirements for qualifying should be the common areas of basic knowledge. A post-qualification specialist examination is intended to follow the Associate qualification. It is acknowledged that because the complexity of the work of the chartered accountant, it is impossible to expect the candidate to be confident in every aspect of that work.

The Institute acknowledges that the quality of practical experience gained by students varies substantially and it states in this regard:

13) Ibid., p.14.par.32.
"... It is impossible under present and immediately foreseeable training arrangements to ensure such common practical experience that it would be fair and reasonable to base final examination tests on this. The examinations must therefore be regarded primarily as tests of whether candidates have prepared themselves adequately in the principles of their work, have developed certain minimum skills, and have acquired a sufficient knowledge of such facts as chartered accountants should know. However, a student as he progresses through his training period should increasingly build up a mode of thinking, and a method of approaching problems, characteristic of a chartered accountant and to this extent questions set in the later papers can be more problem-oriented." 14)

The structure of the various examinations is as follows:

<table>
<thead>
<tr>
<th>FOUNDATION EXAMINATION</th>
<th>PROFESSIONAL EXAMINATION I</th>
<th>PROFESSIONAL EXAMINATION II</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Law</td>
<td>2. Taxation I</td>
<td>2. Auditing</td>
</tr>
<tr>
<td></td>
<td>and Data Processing</td>
<td>(5) Elements of Financial Decisions.</td>
</tr>
</tbody>
</table>

The Institute acknowledges that examination questions set prior to the introduction of the new educational requirements simply required a regurgitation of memorised facts. It is envisaged that questions in the future, will be designed to test the ability of the student to analyse, appraise and comment intelligently and clearly. The preparation for this will entail a sound understanding of the subject and its underlying concepts. It is further intended that the syllabus should be constantly reviewed to keep pace with the changes in the pattern of education.


and training as well as the continuous changes in the environment in which the accountant finds himself.

The regulations do provide for a system of referral at examinations, and where a candidate has successfully completed all the papers except one in which he has just failed, he is entitled to rewrite the whole examination. A minimum mark is set to qualify for a referral.

A detailed syllabus has been prescribed for the examination.

Qualifying examinations of professional institutes can expect perennial criticism. Even the professional examination of the English Institute does not escape criticism, favourable or otherwise, and an education advisor in the United Kingdom, Emile Wolf, states in this regard:

"Whatever one's criticisms of the way in which the new syllabus has been launched, every credit is due to the Institute in one respect: they have devised a syllabus which more closely approximates (both in depth and in range) to the practical realities which today face the profession than any of its predecessors. What is more, they have timed its inception to coincide with more stringent specifications for the accreditation of training facilities in firms and the requirement that education should be programmed to embrace the entire training period. There will still be those who indulge in last minute cramming, and there will still be courses to cater for them - but my reading of the new syllabus both on and between the lines, is that it will not work." 16)

In another article Emile Wolf comments that the new examination syllabus should succeed in educating chartered accountants who should be able to handle the formidable difficulties which the industrial and business communities

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will face for many years to come.\textsuperscript{17}) The National Association of Chartered Accountants Student Societies has also criticised the examinations of the Institute for failing to cover important areas such as the delicate areas of auditors' liability and independence, and unlawful acts of clients and qualifications in auditor's reports.\textsuperscript{18}) The Institute was also criticised for not publishing "model" answers. It really appears to be in vogue to criticise qualifying examinations of the professional institutes.

An analysis of the statistics of the various examinations may be of interest:

<table>
<thead>
<tr>
<th></th>
<th>May 1975</th>
<th>November 1974</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PART I</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pass</td>
<td>49,6%</td>
<td>48,8%</td>
</tr>
<tr>
<td>Fail</td>
<td>50,4</td>
<td>41,3</td>
</tr>
<tr>
<td>Referred</td>
<td></td>
<td>9,9</td>
</tr>
<tr>
<td><strong>PART II</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pass</td>
<td>28,9%</td>
<td>46,6%</td>
</tr>
<tr>
<td>Fail</td>
<td>71,1</td>
<td>43,3</td>
</tr>
<tr>
<td>Referred</td>
<td></td>
<td>10,2</td>
</tr>
<tr>
<td><strong>Passes by Educational Category</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.K. Graduates</td>
<td>58,8%</td>
<td>61,6%</td>
</tr>
<tr>
<td>A-Level entrants</td>
<td>34,1</td>
<td>45,5</td>
</tr>
<tr>
<td>O-Level entrants</td>
<td>36,6</td>
<td>46,2</td>
</tr>
<tr>
<td>Overseas graduates</td>
<td>27,0</td>
<td>38,0</td>
</tr>
<tr>
<td>Others</td>
<td>25,0</td>
<td>45,5</td>
</tr>
<tr>
<td>Overall</td>
<td>46,4</td>
<td>48,8</td>
</tr>
</tbody>
</table>

The abovementioned statistics refer to Part I and Part II of the old examination and the low pass rates for 1975 were expected as these were the stragglers. Examination statistics for the professional examination Part I of

\textsuperscript{17}) Wolf, Emile, "The New Examination Syllabus", \textit{Accountancy}, May 1975, p.92.


\textsuperscript{19}) Steeds, David, "Interpreting the Pass Rates", \textit{Accountancy}, August 1975, p.6.
May 1975 reveal that 58.8% of U.K. graduates passed and that the overall pass percentage was 46.4%. 34.1% of the A-level entrants and 36.6% of the O-level entrants passed.

A comment on the new syllabus reads as follows:

"Now that the analysed results of the new examination have been published, they present a most alarming pattern. Significantly, the number of candidates who passed the new examination at their first attempt has fallen dramatically as compared to the old Part I and II. One can only conclude that the low pass-rates indicate candidates to be insufficiently prepared to meet the new examinations." 20)

7.3 Junior Staff

The policy as outlined in 1972, envisaged that the recruitment of junior staff be facilitated as the regulations will now provide for accounting technicians. Candidates for these positions will have to gain an acceptable ordinary national certificate in business studies, and have completed three years relevant experience with a member in public practice in the United Kingdom. The ordinary national certificate in business studies can be taken either on a half-day or on an evening basis. If a student attains a pass with 60% or higher it is equated as an A-level examination so that he may enter into a training contract to qualify as a chartered accountant. 21)

The possible creation of a lower tier has also caused its fair share of controversy. A well known academic in the United Kingdom, Brian Carsberg, advocates the creation of a lower tier, because although acknowledging that higher standards of education are required for those who have to do complex jobs, it is not necessary for everyone to have the same educational attainment. 22)

The Secretary of the Education and Training Committee, A.B. Samsbury, indicated that there was a demand for a lower tier and the situation was being investigated.

21) A Policy for Educat... C it., p.19.
A brief examination of the main proposals of *Prospectus for a Profession* may be appropriate. *Prospectus for a Profession* has been examined in some great detail recently and comments shall therefore be confined to some of the salient features. The more important recommendations are:

1. Non-graduates should devote two years to full-time study at a university or polytechnic leading to a diploma of higher education, or three academic years of study leading to a relevant degree. *Prospectus* outlines a suggested "model" curriculum for the diploma, and the curriculum provides options for ten percent of the courses to cater for the different directions of interest.

2. Solomons favours a sandwich arrangement and also indicates that a short term of practical experience should precede full-time study.

3. It is stressed that the professional examinations should not re-examine the material covered at universities or polytechnics. A test of professional competence, such as an open-book examination, to test the candidate's competence should be devised. Solomons indicates that this should not be a cram examination, and affirms further that not much study and preparation should be required for this examination. He advocates the use of case studies which would involve a number of disciplines and would require analysis and a report. Notwithstanding that it is intended to be an open-book examination, it is difficult to conceive that no preparation will be required for the examination.

4. A period of practical instruction, which is not to be confused with practical experience, is recommended. The period of practical instruction which appears to follow the Scottish principle is not to be concentrated into one period but be spread over four or five months. He suggests that instruction

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centres be set up and operated by the profession itself, with the operating costs being financed from tuition fees.

5. Solomons advocates the retention of practical experience and indicates that three years experience be required for graduates as well as diplomates. He envisages that this practical experience could possibly be reduced to two years in the future. Solomons does not feel it is essential for training contracts between employers and trainees to be signed but it could be done. To discourage continual changing from one firm to another, he suggests that a period shorter than eight months should not be recognised as part of the practical-experience requirement.

6. Solomons agrees that two-years additional post-qualificatation experience is required before a student is entitled to a practising certificate.

7. *Prospectus for a Profession* refers to "recognised training establishments", which would have to meet standards laid down by the professional body. He envisages that training records would be mandatory. This has already been introduced by The Institute of Chartered Accountants in England and Wales.

8. Specialisation in the future is to be recognised by a fellowship qualification attained through an examination and relevant practical experience. This is already to be enforced in 1978 by The Institute of Chartered Accountants in England and Wales.

9. Solomons recommends further investigation into the question whether continuing education should be mandatory as a condition of registration as a qualified accountant.

Solomons sees his recommendations as evolutionary and not revolutionary and regards the proposals as one set of proposals to be seen in their entirety. In an interview with *Accountancy* Solomons is quoted as saying:

"... I see these proposals as being a fairly well-integrated whole. I think one part does depend on another, and I
should be very uneasy if I saw the thing being pulled to pieces because I think the whole thing might collapse. ... I think the increase in the amount of full-time professional education to at least two years, and the separation of the job to be done at the universities and polytechnics in connection with basic education from practical instruction which I think is best done by somebody else." 24)

The proposals made by Solomons are possibly more relevant to the accountancy education scene in the United Kingdom than to South Africa. A few suggestions may possibly be implemented in South Africa. Although, acknowledging that some form of training contract will improve the discipline of the future chartered accountant, the same result can be obtained by not recognising periods shorter than prescribed minimums with a certain firm. Thus if the prescribed minimum period is eight months, and a student transfers after five months, this period will not be recognised. The consultative committee of accountancy bodies in the United Kingdom has endorsed many of the recommendations made by Prospectus for a Profession but the retention of training contracts is regarded as an essential feature of the training systems of the three institutes of chartered accountants in the United Kingdom. It is believed that it is fair to assume that if the clerk is being exposed to quality experience, he will not change from one firm to the next, especially if he is informed at the commencement of his practical experience period that the experience gained at any one firm is progressive and that by changing from one firm to another he is in effect prejudicing his own progress.

The Consultative Committee of Accountancy Bodies endorses the desirability of formal practical instruction, but its implementation may create problems because of the geographical spread of the United Kingdom. The Committee

also welcomes the distinction between the basic relevant education and practical instruction-cum-work experience, and acknowledges that formal educational establishments will provide the former.

Solomons' concept of recognised training establishments is in effect being enforced in the United Kingdom by The Accreditation Board. South Africa could possibly think of the creation of such an Accreditation Board. We have approved firms, but reservations may be expressed whether the standards applied to these firms are stringent enough. The standards laid down for approval of principals and employers should be more stringently applied in South Africa. It appears that this will be the case in future.

With regard to the conceptual-procedural controversy, Solomons states:

"Where we have gone wrong in the past is in being too little concerned that those who can do things know what are the right things to do. Performing seals can do things, but they are not too good at dealing with unfamiliar situations or in creating new tools to solve new problems."

Solomons quotes an academic from the Harvard Law School who states:

"... the minds of accounting students are trained, but by and large, they are not stretched."

7.5 Training Guide

The Institute of Chartered Accountants in England and Wales has issued a training guide for the assistance of principals and students. The primary aim is to ensure that the training given to the student is of such a nature that the quality and standing of the

profession is maintained and enhanced.

A student's training is classified into seven categories which are:

(a) The training relationship between the authorised principal and the student.

(b) Registration of a training contract.

(c) Progressive and integrated programmes of education, and training for individual students.

(d) Maintaining records of each student's experience and professional development.

(e) Assessing a student's performance on a continuing basis and giving guidance to each student.

(f) Professional examinations of students.

(g) Consideration of each student's eligibility for admission to membership of the Institute.28)

The training guide refers to the recording of progress made by the student, and to facilitate this recording the time spent on various accountancy and auditing functions can be detailed week by week and summarised for a half-yearly period. The training report refers to training in the fields of accountancy, auditing, tax and other experience. The form provides for travelling time and details of non-client time must be given. The training contract between the principal and the student does allow the Institute to inspect the training record kept by the authorised principal in respect of each student.29) It is also suggested that a periodic review of the training record be made by the principal and the student in order to review the latter's work and to ensure that he is receiving suitable work experience. Six-monthly reviews are suggested. The principal is expected to call for progress reports from the college where the student is receiving his theoretical education. The training guide stresses that the principal must show substantial interest in the theoretical education of the student. It is interesting to observe that the principal

28) Ibid., par. 6.
29) Ibid., par. 15.
has to complete a recommendation about the suitability of the student when he wishes to become a member of the Institute. The Institute will assess the propriety of the principal's judgement as well as the effectiveness of his training. The report of the principal must be supported by a completed training record. A trite observation indeed to state that the detailed programme of the Institute causes problems not only for the small practitioner but also for the large practice. For the former it is difficult to provide the necessary audit experience that can be gained in large organisations, and the latter's problems are the supervision of students by their principals. It is interesting to observe that the Institute gives detailed training programmes for three-year and four-year periods of practical experience.

A summary of the three-year training contract indicates that the student will spend 26 weeks out of an available 156 weeks on study leave. The study leave is for the Foundation Examination and the Professional Examinations I and II. Ten weeks study leave is granted for the Professional Examination I and ten weeks for Professional Examination II. The actual work experience accounts for 79 weeks, and secondment to the profession and industry accounts for fourteen and twelve weeks respectively. This permits a student in a small firm to work for a large firm and vice versa.

The progress made by the English Institute during the last five years has been remarkable. Prior to 1972 change came about very slowly but since then certain changes have been effected which should be beneficial in the long term to the accountancy profession in England and Wales.
7.6 Accountancy Education and Training in Scotland - Introduction

Although The Institute of Chartered Accountants of Scotland is one of the smaller institutes in the United Kingdom, it is very active as indicated by its various publications.

An analysis of the membership of the Institute as at 31 October 1975 reveals:

<table>
<thead>
<tr>
<th></th>
<th>Percentage with Practising certificates</th>
<th>Percentage without Practising certificates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident in Scotland</td>
<td>5039</td>
<td>71,2%</td>
</tr>
<tr>
<td>Resident Elsewhere</td>
<td>4147</td>
<td>87,6%</td>
</tr>
<tr>
<td></td>
<td>9186</td>
<td>78,6%</td>
</tr>
</tbody>
</table>

An examination of the educational requirements of the Scottish Institute proves to be an interesting exercise.

Graduate entry is basically a requirement, and a degree awarded by a university in the United Kingdom or by an approved university elsewhere, with a specific content of accountancy as a major and courses in law and economics is accepted by The Institute of Chartered Accountants in Scotland. 31) A graduate with a non-relevant degree must furnish a certificate or diploma, awarded by a university, indicating that the student has successfully completed courses in professionally relevant subjects (accounting, law and economics). 32)

The 1975 intake consisted of 72% graduates with 28% being holders of the Higher National Diploma in Accounting.

30) The Institute of Chartered Accountants of Scotland, letter from the Assistant Secretary, E.A. Swift, dated 4 February 1976.


32) Ibid., pp.12/13. Sections 201(b) and 204(1).
The intake for 1973 and 1974 consisted wholly of graduates because of the introduction of new regulations. 33) It is further interesting to observe that 35% of all graduates did not have relevant accounting degrees. The high percentage of graduates with non-relevant degrees entering the profession can possibly be attributed to the fact that they may attend a one-year full-time course prior to commencing their practical experience. Holders of non-relevant degrees will then attend the block release courses of the Scottish Institute during their practical-experience period.

Students may either enter the profession after completing a Higher Diploma in Accounting awarded by the Scottish Business Education Council, or another approved diploma with similar course content. 34) A person who has worked in the office of a practising member of the Institute for at least five years after the age of seventeen, and who is twenty-five years of age may also be registered as a student and be exempted from the admission requirements as detailed above. 35) Students lacking the necessary subjects may attend post-graduate courses and it is interesting to observe that such students may be eligible for grants from the Scottish Education Department.

A practical-experience requirement supervised by the principal/s under the contract is regarded as indispensable and a training contract is registered with the Institute. The period of practical experience varies from three years for a graduate to four years (which may be reduced to three years and three months) for a holder of the Scottish Higher National Diploma in Accounting. The practical experience of a person admitted as a student on the grounds of age will be determined by the Council. 36) Generally a quota of five C.A. students per practising member is permitted. 37)

33) Letter from the Assistant Secretary, Op. Cit.
36) Ibid., p.16., Sections 301 and 302.
37) Ibid., p.16., Section 302D.
There is no mandatory requirement for principals to submit returns to the Institute of Chartered Accountants of Scotland, with regard to the practical experience of students. It appears that nearly all firms do use a training-record form, which gives the details of the student's practical experience, and which is subject to review by the firm's training partner at regular intervals. The student is also consulted by the training partner. The Institute has produced a training-record form which has been used on a voluntary basis by a certain number of firms since September 1974 and these forms have been submitted to the Institute for inspection. The Education Committee is presently considering whether or not the Institute's record form should be used by all firms and whether or not a mandatory system of monitoring these records should be introduced. This investigation has resulted from the first year's experience of the voluntary system. It appears that it will take some time before Institute policy in this regard will be formulated. With regard to transfers, in theory the student may change his training contract at will, provided he secures the consent of his original principal and the consent of a new principal to the transfer. In practice however, it appears that the number of transfers registered in any one year is negligible. Very seldom does a student change his service contract more than once during the training period.

The Scottish Institute does not provide for lower or higher tiers and is not anticipating the formation of a higher fellowship tier.

7.7 Education of C.A. Students — The Block Release System

Attendance at full-time block-release courses organised by the Institute is compulsory for all students. Attendance

38) Letter from the Assistant Secretary, Op. Cit.
39) Letter, Ibid.
may however be waived in exceptional circumstances. A condition of entry for examination of the Institute is the award of a "duly performed" certificate for a block-release course. A student who does not obtain the necessary certificate (duly performed) for a particular part of an Institute examination is required to re-attend the block-release course. A second failure precludes a student from qualifying as a member of the Institute. Compulsory re-attendance at courses does not count as part of the practical-experience requirement. The Part I course must be successfully completed during the period of service under training contract. Two academic years after passing Part I of the Institute's examination are allowed for the successful completion of the Part II course. 40)

The block-release courses are presented in Edinburgh and Glasgow. The Part I course is eight weeks, consisting of two sessions of three weeks each and one session of two weeks. The Part II course extends over three fortnightly sessions. The intervals between the sessions vary from two to two and a half months. 41)

The subjects covered in Part I are as follows:
- Cost Accounting and Data Processing
- Financial Accounting
- Taxation
- Mathematics and management

No examination is written in Cost Accounting and Data Processing, but attendance is mandatory and a student must obtain a "duly performed" certificate. 42)

The subjects in Part II consist of:
- Auditing
- Interpretation of Accounts
- Management Accounting

41) Ibid., pp.24/25., Section 403(1)
42) Ibid., p.26., Section 403(3).
Courses comprise attendance at lectures, completion of tutorials, exercises and prescribed reading. Six hours of lectures and tutorials are held daily. Assignments and reading are prescribed for the intervening period between attendance at courses.\textsuperscript{43)} The sequence of attendance during the practical experience period is as follows:

\textbf{First year:} Attendance at block-release courses commence during September and terminate at the end of March the following year. During May a student is given two-weeks' study leave immediately prior to the examination. A supplementary examination is written in August.

\textbf{Second Year:} Block-release courses commence during September and terminate during the first half of April, followed by two-weeks' study leave and the Part II examinations. A supplementary examination is written in August.

A successful candidate can then give his full attention to the requirements of his principal during the third year.\textsuperscript{44)}

\section*{7.8 Examinations}

The examinations of the Institute are made up as follows:

\textbf{PART I} \hspace{2cm} \textbf{PART II}

Mathematics and Management \hspace{1cm} Auditing
Financial Accounting \hspace{1cm} Interpretation of Accounts
Taxation \hspace{1cm} Management Accounting

Each subject in each part consist of two papers of two and two and a half hours duration written in the morning and afternoon respectively.\textsuperscript{45)}

\textsuperscript{43)} \textit{Loc. Cit.}
\textsuperscript{44)} \textit{Ibid.}, p.27., Section 405.
\textsuperscript{45)} \textit{Ibid.}, p.28., Section 501(2).
No indication is given of the pass requirements and the Rules and Regulations state:

"A candidate to be successful is required to obtain not less than a certain minimum number of marks in each paper and an aggregate mark which is substantially greater than the sum of the minimum marks in all papers. A candidate sitting one paper, ... by way of referral ... is required to obtain a higher mark than the minimum one in order to qualify for a pass." 46)

The regulations do indicate that there is no limit to the number of candidates who may pass an examination and merit is the sole test in determining who passes. 47)

An interesting phenomenon is that Regulations provide for a possible oral examination at the candidate's own expense before the result of the supplementary examination is known. 48)

Detailed syllabi for each subject are prescribed.

The statistics of the 1975 Spring Diet of Examination reveals that 47.2% passed all three papers of Part I, that is 335 candidates out of 710. Thirty-four candidates were referred in one paper. 49)

7.9 Scottish Higher National Diploma in Accounting

The Scottish Higher National Diploma in Accounting, which is a two-year full-time diploma awarded by the Scottish Council for Commercial, Administrative and Professional Education, is formally recognised by the Institute of Chartered Accountants of Scotland. The Rules and Regulations of the latter define the entry requirements to the Diploma as being four passes in the Scottish Certificate Examination, three of which must be in the higher grade (including English) and mathematics may be higher or lower grade. 50)

46) Ibid., pp.30/31., Section 507.
47) Ibid., p.31., Section 507.
48) Loc. Cit. Section 508.
The subjects taken for the diploma are:

First Year
Accounting I
Costing
Economics of Industry and Commerce
Legal Principles in Accounting
Mathematics and Statistics
Occupational Psychology and Sociology

Second Year
Accounting II
Auditing
Management Accounting
Management Techniques
Taxation
Law (Company, Trust and Bankruptcy)

The introduction of Psychology and Sociology is definitely a move away from the pure procedural matters normally associated with such a diploma.

The approach to accountancy education in Scotland differs from the approach in most countries, in that the profession plays an active role through its own block-release courses. A brief review of the developments in accountancy education during the Twentieth century reveals an evolutionary trend leading to the present modus operandi.

7.10 Historical Review of Accountancy Education in Scotland

A unique aspect of accountancy education in Scotland is that the Scottish Institute has been providing its own tuition from as far back as 1892. 61) Attendance at these classes was voluntary until the introduction of the latest educational arrangements in 1973 when the Institute's tutorial classes became compulsory. The role played by the Scottish universities in accounting education is much greater than that of the English universities. Attendance at university on a part-time basis was compulsory for classes in law and another

prerequisite was attendance at classes in economics and accountancy. A watershed in the history of accountancy education in Scotland is no doubt the year 1960, when the concept of an "academic year" was introduced. Attendance at universities on a full-time basis was now mandatory. This resulted from the implementation of the recommendations of a special committee on the examination and training of apprentices, under the chairmanship of a past president of the Institute, Thomas Lister.

Recommendation with regard to the academic year reads:

"... an apprentice be granted leave of absence from his master's office for 'an academic year' (of, say, nine months) to be spent in whole-time study at a Scottish university,... the academic year being counted as service under indenture." 62)

The subjects that were to be taught during the academic year were accountancy, law and economics. This academic year was during the third year of a five-year apprenticeship.

In its justification for an academic year the Lister Committee looked at certain disadvantages of part-time study. The principal was inconvenienced if these lectures were held during office hours, and if lectures were held after office hours they placed excessive strain on the apprentice. Part-time lectures do not allow for extensive reading, with the result that the student crams and merely regurgitates the lectures. Part-time lectures also inflict hardships on apprentices outside the main centres of the population. Some of the advantages of a full-time academic year were seen as an enrichment of the apprentice's knowledge, a reduction in the interruptions to his work experience, and a reduction in the burden of part-time tutorial classes. It was felt that the recruitment to the profession would be improved if a certain portion of the study was on a full-time basis. No doubt many South African academics would agree with the findings of the Lister Committee. The Lister Committee did not favour a specialist tier or a Fellowship grade of membership, because it felt that

this would depreciate the value of the C.A. qualification.\textsuperscript{63)\textsuperscript{63})}

The idea of secondment to industry for a period during the apprenticeship was rejected, and the motivation is states as follows:

"... that the period of service required with a practising chartered accountant is none too long in which to gain practical experience in the fundamentals of the profession, and that specialised experience in the industrial aspects of accounting is better acquired after completion of apprenticeship. Furthermore, the Committee considers that it would be difficult to find sufficient suitable industrial and commercial organisations prepared to accept apprentices for a short period of training and able and willing to provide adequate supervision." \textsuperscript{64)\textsuperscript{64})}

During 1962 it was announced that the general education requirement for entry into the profession would be matriculation at university entrance level, and this was introduced in 1966. Another committee on education and training, the Dewar Committee, suggested that the ultimate aim must be recruitment of university graduates. This committee also recommended that the apprenticeship year be during the second year. Secondment to industry during apprenticeship was again rejected by this committee. Another committee, the Charles Committee, recommended that graduate entry now become mandatory as the academic year did not comply with present requirements. The intake of graduates had improved from 9\% as reported by the Dewar Committee, to 15\% in 1967/68, 26\% in 1968/69, and 36\% in 1969/70 and it was expected that this trend would continue. The Charles Committee also suggested the introduction of a one-year full-time post-graduate diploma course in accountancy and if necessary law and/or economics or graduates with non-relevant degrees. This

\textsuperscript{63)\textsuperscript{63}) Lister Report, Op. Cit., par.102, as quoted in Prospectus for a Profession, Ibid., p.18.}

\textsuperscript{64)\textsuperscript{64}) Lister Report, par.101., in Prospectus for a Profession, Loc. Cit.
committee rejected part-time study on the grounds that it was out of line with current educational and sociological thinking, and insufficient for the breadth of education required. It stated that recruitment was detrimentally affected by part-time study. This committee recommended compulsory day release and/or block release courses linked to programmes of reading, and it recommended that the courses be conducted by the Institute through an accountants' college. The latter was desirable as colleges of education did not have suitable staff for the job. The recommendations were partly accepted and there are basically two avenues open to entrants in the profession; a degree or the Scottish Higher National Diploma in Accounting.

A review of the educational system in Scotland proves interesting because the developments there have been different from those in other parts of the world. Certain academics believe that attendance at these block-release courses result in intensive cramming, which cannot be advantageous to the candidate and can possibly not be justified pedagogically. It may be argued that block-release is preferable to intensive part-time study, as one presently finds in South Africa. No doubt practitioners in South Africa will not agree with this proposition as they believe that the discipline resulting from part-time study stands the future chartered accountant in good stead. The college of the Institute of Chartered Accountants of Scotland is staffed by seven full-time members and criticism is that without constant exposure to the realities of auditing practice, it is difficult to envisage how full-time members of staff can be kept up to date. It is believed that the approach of some of the provinces in Canada is better in that block-release courses are held during quieter periods of the year, and the staff-training partners and the newly-qualified audit managers of larger firms assist by lecturing at the provincial institutes. Their experience has been that no difficulty is experienced in finding suitable lecturers because all the large firmas like to be represented at these courses.

CHAPTER 8

A REVIEW OF EDUCATIONAL CONCEPTS IN ACCOUNTANCY

AROUND THE WORLD

8.1 Introduction

It has been stated:

"Nothing is so useless as a general maxim",

but it is necessary to summarise the concepts of accountancy education found around the world. In the previous chapters the approaches to accountancy education in various countries visited have been discussed, namely Australia, New Zealand, United States of America, Canada, Scotland, England, Germany and Holland. The approaches of France, Belgium, Denmark, France and Italy are also discussed, although they were not visited. Generalisations on such an extensive trip may prove to be an exercise in futility. The only generalisation that could be made is that the approaches to accountancy education around the world are so diverse that the impression gained was that education in different professions was being investigated.

8.2 Qualifications and Controlling Bodies

At the outset it is necessary to examine the various structures found around the world. In Australia the Australian Society of Accountants has a multi-tier structure with the following descriptions: Provisional Associate (graduate completing the practical experience requirement), Associate, Fellow and Senior Associate. The qualification, Senior Associate, is attained either by examination or through the completion of certain approved graduate courses at university. The membership of The Institute of Chartered Accountants in Australia is divided into Fellows and Associates. The lower tier is provided by the Institute of Affiliate Accountants. The entrance requirement is basically matriculation with a pass in English. It is to be noted that both the Australian Society and the Institute approve of the lower tier.
In New Zealand one of the few truly unified accountancy professions is found. This unity has been present virtually since its inception. Accountants who wish to practise as public accountants, need to pass the relevant examinations and register as practising accountants.

In the United States of America, the only tier is the Certified Public Accountant. The profession has examined the possibility of creating a specialist tier, and the matter has been deferred to a special committee to investigate the problems involved.

It is interesting to note that Scotland has approved the creation of a lower tier. Those students who have completed a Higher National Diploma in Accounting Studies and who have attained a mark higher than 60% in their examination for the diploma, may register a service contract, which will enable them to qualify as chartered accountants. Present indications in England are that the Institute is also contemplating the creation of a junior tier. A recent symposium on accountancy indicated that there is a demand for a junior tier. The justification for a junior tier is that not all future accountants will have to solve complex problems, and that there is room for accountants with a lower level of competence.

Diversity of approach is symptomatic of the structures in the various countries around the world. There is a growing belief that the great amount of specialisation which permeates the accounting profession, will have to be recognised in the future. On the other hand it is also recognised that there is possibly room for a lower tier, an accounting technician.

8.3 Entry-Requirements

Once again generalisations may prove to be an exercise in futility but it can be stated that graduate entry is gaining universal acceptance fairly rapidly. However, there are certain countries that do have provisional entry, subject
to the attainment of a degree at a later stage. An example of this is in Canada, where, in the Province of Ontario, a student may register as a provisional student and on the attainment of his degree, will be registered as an accounting student. He does receive credit for practical experience gained prior to the attainment of his degree. In most states of the United States of America, graduate entry is a pre-requisite, and if the American Institute has its way the future accountant will undergo five years' academic education with no practical experience.

In Scotland graduate entry is preferred, but as mentioned above, a person may enter the profession after having completed the Higher National Diploma in Accounting Studies.

### 8.4 Teaching by Accounting Institutes

Certain accounting institutes in the world can proudly state that they have not abdicated their duties regarding the training of their students. The approach to accountancy education is controversial, and many academics have stated that it is impossible to simulate the practical cases in the classroom situation. Another problem facing the academic is that it is difficult to keep up with the latest professional developments, and, especially in the field of auditing, it is necessary for the lecturer to be exposed to the practical experience. It is easy to talk about exercising one's judgement, but it is difficult to apply it in the practical environment. This judgement can only come about through the necessary approved practical experience.

Because of the abovementioned factors, certain accountancy institutes have decided to mount their own final-year courses. Once again, diversity of approach is found. The approach of the Australian Institute, namely the "professional year", is indeed very interesting. The fact that students attend fortnightly three-hour sessions, conducted by members of the
profession, ensures that the students are not being exposed to cram courses. The groups are limited to approximately 25 students, and practitioners act as lecturers and supervisors. The only serious reservation there may be about the Professional Year is how long the young practitioners will be able to maintain their enthusiasm and motivation for the presentation of these courses. The Australian Society is also going to commence with its Professional Orientation Year. This year differs in approach from that of the Institute because of its different structure.

The Professional Year does not have a detailed prescribed syllabus as this varies from year to year, depending on the prevailing circumstances of the accountancy profession. This does allow for flexibility of approach, and the final qualifying examination, which is not regarded as a hurdle, depends on what has been discussed during that particular year. An advantage of the Professional Year is that the tutors are in constant contact with the latest developments within the profession. As long as pressures of work do not deplete the enthusiasm of the lecturers and supervisors, the Professional Year, it is submitted, is a very sound approach to the final year of accountancy education.

In Canada certain provincial institutes run their own block-release courses. In the Province of Ontario the courses are organised during the slack time of the profession, and as the lecturers are on the staff of the larger firms, it means that they are in contact with the latest developments in the profession. One objection to the block-release course is that it may be a cram course. This, however, is denied by the organisers. Between the block-release courses the registered students are expected to submit written assignments to the institutes. This may rule out the idea that they are cram courses. Pedagogically speaking, there may be reservations about students being exposed to intensive lectures for a period of four to eight weeks. It is believed that the students will benefit more from lectures over a longer period. The block-release course of the Scottish Institute is similar in approach to that of the Ontario Institute. The main difference is that most of the tutors of the Scottish Institute are full-time employees.
of the Institute. This could imply that the tutors are not in contact with the practical environment, and the same reservations about university academics could apply to the tutors of the Scottish Institute.

A dichotomy of interests between large firms, on the one hand, and the medium-sized and smaller firms, on the other hand, manifests itself throughout the world. The larger firms want the universities to teach concepts, and the firms themselves to teach their trainee accountants the practical application of the concepts. The smaller firms do not have the facilities to mount their own courses, and would thus prefer that the teaching institutions provide a more technique-oriented approach.

8.5 Universities

Throughout the world there is a growing tendency for academics to question their role in accountancy education. University academics believe that they are there to teach the underlying philosophy of subjects and not the techniques. They maintain that the techniques should be taught by the firms and/or professional institutes. The academics are there to enquire as to the "why's" and not so much the "how". It is also their function to transmit the knowledge from one generation to the next. It may be stated that the university academics are seekers of truth.

Larger universities in the United States of America tend to be very conceptual in approach, but the academics at these universities maintain that their graduates can pick up the techniques in a relatively short time once they enter the offices of professional accountants. On the other hand, a trend in America is the growth of Professional Schools of Accounting. Certain universities endeavour to develop the image of Professional Schools of Accounting, where the approach to accountancy education is very much profession-oriented.

In certain countries, universities are accredited by the professional institutes on an annual basis. This
accreditation is also done by accreditation bodies in the United States of America.

A different approach to university education is the co-operative movement, whereby students have an alternating scheme of attending lectures for a certain period followed by a certain period of work experience and this cycle continues until a degree has been completed. This approach has the advantage of ensuring that the student is able to match his academic theory with practical applications throughout his academic career.

8.6 Practical-Experience Requirements

Another aspect which has caused its fair share of controversy is the practical-experience requirement. The value of the practical experience is not questioned, but the value of the practical-experience requirement is suspect, because it cannot be properly controlled. It is virtually impossible to have control over the quality of experience that a trainee accountant will receive. On the one side of the scale we have the archaic system of articulated clerkship with limited transferability or service contracts, and on the other side of the scale we have the liberal approach of no service contracts with a practical-experience requirement, or no practical-experience requirement whatsoever. Articles of clerkship, or service contracts seem to be disappearing. It is contended that if the quality of experience that a trainee accountant is exposed to, is the right type of experience, no articles of clerkship or service contract will be required to keep him with a specific employer or principal. It is argued that the market-place will determine which firms give quality experience and which firms do not. Thus a prerequisite for the market-place argument is that free transferability should be allowed. Many countries have no service contract, but the approved employer issues a certificate stating not only that the trainee accountant has received relevant experience, but also the period spent with the firm. Experience has shown that trainee accountants do not jump from firm to firm, because training is a
progressive process, and by changing from one firm to another they impede their development.

Diversity in the practical-experience requirements appears in the United States of America. In certain states no practical experience is required, depending on the academic qualifications of the person involved. The nature of the practical-experience requirement differs in the various states. Practical experience in governmental offices, commerce and industry, finance or a practitioner's office is accepted in many states.

A review of the educational requirements of a few of the European countries indicates that in Germany, Holland and Denmark the accountant has a broad education. In Holland the approach is very much management-oriented and no practical experience is required. It is encouraged, but presently it is not a mandatory requirement. In Germany, after completion of a four-year degree, the accountant must undergo a practical-experience requirement of six years. A minimum period of four years must be spent with an accounting firm.

8.7 Final Qualifying Examinations

Another bone of contention is the final qualifying examinations set by professional accounting bodies. Many academics believe that the universities should have the right to determine who should be the entrants to a profession. Other academics differ, believing that the professional institutes do have a right to determine who may become a member of their institutes. An analysis of the position overseas, once again reflects diversity. Certain institutes opt out of the examining role by delegating this function to approved universities. Other institutes set their own examinations, which are intended to be difficult. Another group of institutes regard their examinations rather as a "back-stop" so as to ensure that the profession will not embarrass itself, by letting somebody loose on the public, who may be insufficiently qualified.
The approaches to the actual examinations also differ quite substantially. Certain institutes prefer shorter questions and utilise the multiple-choice examinations. In the United States of Americas, with the logistical problem of 38 000 candidates writing the examination, it may be expediency that dictates the use of the multiple-choice examination. This examination can be marked by a computer, which is a major time-saving device. An innovation of late, is the introduction of a comprehensive or case study question. This question which has caused its fair share of controversy, enables the examiners to place the candidates in an in-office situation. Certain institutes require oral examinations as well as a thesis. Other institutes allow open-book examinations, stating that having text books in the examination room is no major advantage because if the candidate does not know the necessary theory and application before the examination, the use of text books is very time consuming.

8.8 Conclusion

From the abovementioned summary of structures of the profession, entry requirements, practical-experience requirements, the role of universities, the role of professional institutes and the final qualifying examinations, it is apparent that consensus of opinion is a virtual impossibility. It must be borne in mind that circumstances prevailing in various countries will no doubt dictate different approaches to accountancy education. There can be no doubt that diversity of approach is desirable, as conformity of approach can only result in stultification. Diversity of approach results in a cross-fertilisation of ideas which, with the growing international character of the accountancy profession, can only be beneficial in the long run.
PART III

ACCOUNTANCY AND ACCOUNTANCY EDUCATION

IN SOUTH AFRICA
CHAPTER 9

ACCOUNTANCY IN SOUTH AFRICA:
A HISTORICAL REVIEW AND THE STRUCTURE OF
THE CONTROLLING BODIES OF THE PROFESSION

9.1 A Brief Historical Review

The first reference to auditors in South Africa appears to be with the appointment of an auditor-general under the Governorship of Lord Macartney towards the end of the eighteenth century. This regime was followed by a Dutch Government and J.A. de Mist was expected to report on the government of the Cape of Good Hope and this report refers to "Administration of Finance" and contains a statement, which states:

"That books be kept in two sections, 'Receipts' and 'Expenditure', each under a separate heading, and at the end be summarised and 'closed' or 'balanced' so that it will be possible to see at a glance what the profit or loss for the year amounted to.

... That in future the book-year should begin on January 1st and end on December 31st of each year, as is the custom in most offices."

Noyce then indicates that the Receiver General of public funds was

"required 'to balance all his receipts with his expenditure by means of accounts and vouchers filed in ONE book', because 'simplicity is a virtue, especially in financial matters'"

Needless to say, accounting for financial affairs of the complex conglomerates would have been regarded as a vice by J.A. de Mist.

Criticism of auditors was also in vogue during the nineteenth century and the Natal Times in 1852 refers to an address by an auditor and states that a speech did not give:

"... indications of practical business knowledge and habits as would, of themselves, induce a cautious speculator to fill up the blank in the form of application for shares."

1) This review is based mainly on an article by G.E. Noyce. "The History of the Profession in South Africa", The South African Accountant, March 1954, pp.3/12.

2) Ibid., p.3.

3) Loc. Cit.

4) Ibid., p.4.
The discovery of diamonds in 1886 led to large financial deals, amalgamations, flotations and the formation of limited liability companies. The discovery of gold also resulted in a boom on the Witwatersrand and the services of the accountant and auditor were required for the protection of the public. Noyce refers to a situation where a company issued shares to former shareholders, who discovered that they had sold more shares than they possessed and they adopted the

"expedient of increasing the capital and issuing further shares for the adjoining property of doubtful value, acquired by the company from themselves.”

The formation of an accounting profession in South Africa has been greatly influenced by developments in the United Kingdom. In 1854 a Royal Charter was granted to the Edinburgh Society, followed by charters to the Glasgow Society and the Aberdeen Society in 1855 and 1857 respectively. The Institute of Chartered Accountants in England and Wales was established in 1880, with the Society of Incorporated Accountants and Auditors being established in 1885. Other accounting bodies to be formed were the Corporation of Accountants Limited and The London Association of Certified Accountants Limited. All the aforementioned bodies were to become interested in the profession in South Africa.

During the mid-nineteenth century the auditor was recognised, but did not have any specialised training and generally occupied this position because of his standing in the community. The sixties and seventies of the nineteenth century saw the enactment of legislation referring to limited joint stock companies and the year 1892 saw the enactment of a Companies Act in which the auditor was to receive statutory recognition.

The year 1894 is an important date in the history of the profession in South Africa, as the first organised controlling body of accountants in South Africa was formed and established in the Transvaal under the name of the Institute of Accountants

5) Loc. Cit.
and Auditors in the South African Republic. In 1895 the Society of Incorporated Accountants and Auditors of England established a branch in South Africa with its own local committee to look after the interests of its members. In the same year the Institute of Accountants in Natal, was formed. This caused some controversy as the institute did not provide for members from Maritzburg. It appears that the first examinations of the Institute of Accountants in Natal were set in 1899. The examination for admission as a Fellow comprised ten subjects involving separate papers, whereas to qualify as an Associate eight subjects had to be passed. The Natal Institute succeeded in 1905 in having legislation enacted which provided for auditors for the Boroughs of Pietermaritzburg and Durban. This position could be held by members of its Institute only, or of the Institute of Chartered Accountants or the Society of Incorporated Accountants. This step led to the formation of the profession in Natal and during 1909, the Natal Society of Accountants was established under a Natal Act. This act provided for the registration of accountants, and practice was restricted to those entitled to the designation "Registered Public Accountant (Natal)."

The year 1899 saw the approval of a Charter of Incorporation for the Institute of Accountants and Auditors in the South African Republic by the Transvaal Volksraad. The outbreak of the 1899 - 1902 war stopped further developments until the Society of Incorporated Accountants and Auditors formed a branch in the Transvaal. Noyce states that this body, together with members of The Institute of Chartered Accountants, was responsible for introducing traditions of best accounting practice to South Africa. Another body, known as the Institute of Chartered Accountants in South Africa, was formed by Scottish and English Chartered Accountants.

The Transvaal Society of Accountants was born in 1904, when the members of the overseas bodies of the Incorporated and Chartered Societies sponsored legislation which resulted

6) Ibid., p.6.
in the passing of Ordinance No. 3. (Private) of 1904.\textsuperscript{7)} A Provisional Council had the unenviable task of determining which members of established bodies would be entitled to registration. Prospective entrants had to be in bona fide practice as public accountants, and were admitted by virtue of their office and experience. This registration resulted in 593 members being placed on the register. The first examinations of the Transvaal Society of Accountants were set during 1905 and in the intermediate and final examinations five out of nine entrants passed each examination.

In 1907 the Cape Colony followed the example set by the Transvaal and Natal and the Society of Accountants in the Cape Colony was formed under the Companies Act of the Colony.\textsuperscript{8)} One hundred and eleven members registered initially and the name of the society was changed in 1921 to "The Cape Society of Accountants and Auditors". The name has subsequently been changed to the Cape Society of Chartered Accountants. A voluntary body was created in the Orange Free State when a memorandum of association was signed by seven accountants. The first meeting was held during January 1908 and endorsed the action of the Cape Society by adopting the designation "Registered Accountant O.R.C."

It is interesting to observe that the societies were established in different ways. The Transvaal Society and the Natal Society were established by acts of parliament; the Cape Society was established as a company not for gain; the Orange Free State Society was established as a voluntary association.

After the formation of the Union of South Africa various attempts were made to secure uniform legislation. During the period 1911 to 1913 various conferences were held among the four recognised bodies of accountants, and an attempt to introduce a Union Accountants Registration Board was rejected by a select committee, because the preamble

\textsuperscript{7)} Loc. Cit.

\textsuperscript{8)} Loc. Cit.
had not proved to be satisfactory and a majority of the committee did not approve of the compulsory principle. At the time of Union, Natal and Transvaal restricted admittance but in the Cape and Orange Free State there was no such restriction.

With reference to a unified profession Noyce states:

"The Societies had, however, continued, since Union, to work towards the goal of unification of the profession in South Africa." ⁹)

It has been a long battle, as the year 1976 has not yet seen the formation of a truly unified profession. One of the first steps in this regard was undertaken by the Transvaal and Natal Societies in 1919 when they decided to co-operate in regard to examinations, which were identical except for company law. It is further interesting to observe that during 1919 for the first time women were allowed to become members of the Natal Society. Hopes of a uniform profession were brought one step closer in 1921 by the formation of the South African Accountants Societies General Examining Board, which was established by the four provincial societies. The Rhodesian Society of Accountants was included in this organisation and provision was made for uniform conditions of admission, examinations and regulations for service under articles. Further attempts at passing legislation to recognise a unified profession were made during 1923 and 1926 but failed because of objections made by bodies and individuals outside the provincial societies.

The designation, Chartered Accountant (S.A.), was given during 1927 when the Chartered Accountants Designation (Private) Act was passed, allowing members of the societies the use of the designation. The preamble to the Act reads:

"... by the combined efforts of the said four Societies, a large body of highly qualified persons has been created throughout the Union, possessing a status warranting the conferring upon individual members of the said Societies of a statutory designation." ¹⁰)

⁹) Ibid., p.7.
¹⁰) Loc. Cit.
At the time it was pointed out that certain hardships would arise, and that certain members who had practised public accountancy would be discriminated against because they were not members of one of the societies. In terms of a so called "Pearce Agreement" persons were allowed to appeal to a Special Appeal Board under the chairmanship of a Supreme Court Judge. Seventy-three applicants out of 245 succeeded in being admitted. The designation, Chartered Accountant (S.A.), was offered to persons of good character who had been in public practice for a period of not less than ten years. Members who had five years only in practice were required to pass a test of a moderate standard. In 1928 a new body, The Institute of Accountants of South Africa Limited, was formed in the Cape. In 1932 The Incorporated Society agreed to curtail its examinations or register articles independently of the South African Societies. It also agreed to accept the examinations of the General Examining Board for qualifications of its clerks, with the additional special final examination being set by the Incorporated Society. The gesture of the Incorporated Society was seen as a contribution to unifying the profession.

Serving articles was made compulsory after February 1934, the period being five years for matriculants, with graduates of recognised universities receiving a remission of two years. In 1934 Dr. H. Reitz introduced a private bill in parliament to provide for the registration of accountants in the Union, but it was unsuccessful and it did not proceed beyond a first reading.11) His second attempt in 1936 also proved to be in vain. An accountancy profession commission was appointed at the instigation of the late Hon. N.C. Havenga in 1936 and its terms of reference were:

"(1) Whether it is advisable to place the profession of accountancy and auditing within the Union of South Africa on a unified basis by the incorporation of a representative body having control over the whole profession, and keeping a register in which should be inscribed the names of all qualified

11) Ibid., p.8.
members of the profession, and, if so

(2) the method by which such register should be established
and controlled."^{12)}

This effort to unify the profession was unsuccessful as
the Cape Society supported by two branches of the Incorporated
Society, opposed registration on the grounds

"that it would not result in finality, and that further agitation
would in due course arise for the register to be re-opened to
admit classes of persons previously ineligible, thus resulting
in the lowering of the status of the profession."^{13)}

The report of the commission saw the formation of a register
of accountants as practical and also an urgent necessity.
The commission made the following statement:

"Your Commissioners are satisfied that the societies referred to
in the Chartered Accountants Designation Act have reached and
maintained a professional status of a high order comparable to
the best Societies overseas, and that any measure failing to
recognise this fact or tending in any way to lower that status
would be contrary to the interests of the public and the
profession."^{14)}

The report favoured making concessions to existing practition-
ers, who complied with only certain requirements. They
could practice provided they did not use the designation
"Chartered Accountant". This was opposed by one of the
societies which stated if these concessions were made
it would be breaking faith with accountants who had passed
through the usual channels. It also added that all cases
of hardship had been discussed by the committee in terms of
the "Pearce Agreement" less than ten years previously.
This attempt, as well as subsequent attempts in 1936 and 1938,
was futile. A private bill, introduced by Mr. P.V. Pocock
in 1938, passed its second reading and was discussed in the
House in Committee during February 1940. This attempt also
failed as the outbreak of the Second World War interrupted
the proceedings. From these examples it is obvious that the

^{12)} Loc. Cit.
^{13)} Ibid., p.9.
^{14)} Loc. Cit.
process of attaining some unity in the profession was a long and painful one. This phenomenon was applicable not only to South Africa, but also very much to England where efforts to unify the profession had commenced as far back as 1902 and to date (1976) have not yet achieved this unification.

The year 1941 saw the formation of the Association of Practising Accountants of South Africa, which was an offshoot of the Institute of Accountants of South Africa Limited. A memorable year for the profession was 1945, with some form of consolidation of the profession through the formation of The Joint Council of Societies of Chartered Accountants in South Africa. The purpose of the Society was to ensure uniformity amongst the Societies themselves upon matters of policy affecting the profession, and the body was to be the forerunner to The National Council of Chartered Accountants (S.A.). This body has fulfilled an important public relations role by liaising between the profession and the government on taxation, amendments and alterations to company law, and has made recommendations on behalf of the profession when requested to do so. In the past The National Council of Chartered Accountants has relied very substantially on part-time and voluntary effort.

9.2 Post World War II Developments

Until 1950 the educational arrangements for articled clerks were in the hands of technical colleges, universities and correspondence schools. Different arrangements existed in each province and an important date in the history of the profession was 12 January 1950 when representatives of the universities and of the Chartered Societies met in Cape Town to co-ordinate the educational process. It was decided

15) Ibid., p.10.
that certain universities would examine articled clerks up to the final qualifying examination, and the scheme entailed articled clerks serving a period of five years, if matriculants, reduced to three years in certain cases. Universities would provide the courses and the syllabi would comply with standards laid down by the General Examining Board. The Final Qualifying Examination was not dispensed with, as it was felt it was essential in order to ensure a uniform standard. Examinations were set in accounting, costing, auditing and the general duties of a professional accountant, and the purpose of the papers was to test the fitness of candidates to practise. It is interesting to note that the examinations could not be taken before the last year of articles.\(^{16}\) It was another step in the proverbial right direction in the attainment of uniformity of the profession in South Africa.

The co-operation, as far back as 1950, between universities in South Africa and the profession was far-sighted planning indeed. Many of the other leading professional institutes in the rest of the world followed this trend only during the decades of the sixties and the seventies. It is during the last decade only that great strides were made in accountancy education at universities in the United Kingdom, and at Australian universities there were rapid developments only after the Vatter Report in 1964. The opinion has been expressed by the van Wyk de Vries Commission that universities must not influence the professions too much, and by the same token the professions must not influence the universities too much in their approach to education.\(^{17}\) A brief discussion about the role of universities in education appears elsewhere.

The latter half of the forties saw a certain amount of progress being made and in November 1946 the Treasury invited all organised bodies of accountants in the Union to submit

\(^{16}\) *Loc. Cit.*

a draft bill on the unification and control of the profession.\(^{18}\) A conference held in Bloemfontein during April 1947, was attended by representatives of societies and bodies of accountants comprising the whole profession in South Africa. A draft bill stating the requirements of various bodies was prepared and sent to the Treasury. This bill was supported by all the bodies represented at the conference, with the exception of one. The Treasury could not accept the bill in its entirety as it did not take into account the protection of all interests. The profession then amended the legislation, taking into account the criticism of the Treasury. This led to a meeting in Cape Town in March 1950 which was attended by thirty-four persons representing government departments and the profession. A revised bill, endeavouring to embody the decisions taken at the Bloemfontein conference, referred to previously, and at the same time accommodating the views of the Treasury, was prepared. It appears that this law had to be a compromise to a certain extent, but this compromise was in the best interests of the profession as it eventually led to the presentation of a bill which subsequently resulted in the formation of the Public Accountants' and Auditors' Board. Consensus of opinion was reached during November 1950 only. A breakdown with membership of professions in the Union at the time, who unanimously supported the Bill was:

<table>
<thead>
<tr>
<th>Membership in 1950</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The Transvaal Society of Accountants</td>
<td>1,115</td>
</tr>
<tr>
<td>The Natal Society of Accountants</td>
<td>342</td>
</tr>
<tr>
<td>The Cape Society of Accountants and Auditors</td>
<td>505</td>
</tr>
<tr>
<td>The Society of Accountants and Auditors in the Orange Free State</td>
<td>100</td>
</tr>
<tr>
<td>Total for the Chartered Societies</td>
<td>2,062</td>
</tr>
<tr>
<td>The South African Branches of the Society of Incorporated Accountants and Auditors</td>
<td>520</td>
</tr>
<tr>
<td>The Institute of Accountants of South Africa</td>
<td>106</td>
</tr>
<tr>
<td>The South African Branch of the Association of Certified and Corporate Accountants</td>
<td>104</td>
</tr>
<tr>
<td>The Association of Practising Accountants of South Africa</td>
<td>54</td>
</tr>
<tr>
<td>TOTAL MEMBERSHIP</td>
<td>2,846</td>
</tr>
</tbody>
</table>


\(^{19}\) Ibid., p.11.
It appears that a unique procedure was adopted in the passage of the Bill through Parliament. Pressure of work resulted in the Bill being submitted to the Senate first as the Upper House had time available, and it came before the House of Assembly only during June 1951, becoming operative on 1 November 1951.\(^\text{20}\) The constitution of the original Board in terms of Act 51 of 1951 consisted of seventeen members made up as follows:

- Representatives of the Chartered Accountants 7
- Representatives of other bodies of accountants in South Africa 4
- University representatives 2
- Government representatives 4\(^\text{21}\)

The first meeting of the Board was held on 24 October 1951 at the Union Buildings, Pretoria, and Mr. K. Lamont Smith was appointed the first chairman.

It may be appropriate to refer to some of the comments delivered by the former Minister of Finance, The Late Hon. N.C. Havenga, at the first meeting of the Public Accountants' and Auditors' Board on 24 October 1951. Referring to the Public Accountants' and Auditors' Act of 1951 he stated:

"... The present satisfactory position has not been achieved without considerable effort, nor without frequent disappointments. But let us not look back. Let us rather consolidate our achievements and look forward.

In consolidating our achievements let us do so, firstly, by assuming the grave responsibilities entrusted to us by parliament, in a spirit of loyal public service (emphasis mine) as in accordance with the best traditions of being our 'brothers keeper' ... In the phraseology of Section 21 of the Act, let us take the steps which may be considered expedient for the maintenance of the integrity, the enhancement of the status and the improvement of the standards of professional qualifications of accountants and auditors." \(^\text{22}\)

\(^{20}\) Loc. Cit.

\(^{21}\) Ibid., p.12.

It was pointed out that the Minister of Finance had faith in giving the profession the privilege of a newly established monopoly and it was hoped that this would not be exploited. The point was made that the accounting profession owed a duty to the public, and Section 26(3) of the Public Accountants' and Auditors' Act, which refers to material irregularities, takes cognizance of public interest. The opening speech was concluded with the words:

"Gentlemen, I now leave the affairs of the accountancy profession in your hands with complete confidence in your ability to build up and maintain a service that will be a credit not only to the profession, but also to our country." 23)

During the last quarter of a century the structure of the profession has not changed dramatically. Name changes have come about and the name of the Joint Council of Societies of Chartered Accountants of South Africa, which came into force on 1 January 1946, was changed in 1966 to "The National Council of Chartered Accountants (S.A.). During 1958 The Joint Council of Societies of Chartered Accountants published its Report on Training and Education for the Profession. The Committee critically examined the professional education programme and suggested recommendations for its improvement.24) In 1962 a committee was formed to investigate the educational requirements of future accountants, and the educational structure required in South Africa.

The four basic essentials in any system designed to produce properly qualified accountants were defined by the committee as:

(1) A minimum preliminary educational qualification of a reasonably high standard.

(2) Academic training at university level.

(3) An adequate period of practical training and experience in the office of a practising professional accountant.

(4) A uniform qualifying examination conducted by the profession.25)

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23) Ibid., p.3.
A brief summary of the recommendations of the report indicates the following:

(1) A pass in either of the two official languages at the higher grade and in mathematics was defined as minimum entry requirements.

(2) University education should comprise two stages. In the first stage, which was to be an interim measure, the length of the course leading to the Certificate in the Theory of Accountancy, which at the time took four years part-time by articled clerks, be increased to five years. The curriculum should be extended to include a special course in either of the official languages as well as a special course in economics. The emphasis in the language course was to be on expression. The second stage of this recommendation was that entry to the profession be restricted to persons who, either by full-time or part-time study, have obtained credit for a prescribed minimum number of courses towards a university degree. The first part of the recommendation was accepted, but the second was referred for further consideration.

(3) It was recommended that the articles of clerkship be abolished and replaced by a system of registered trainee accountants who, within limits and subject to certain conditions, would have free transfer of their services from one practitioner to another. (A trite observation to state that this recommendation was not accepted).

(4) That after accountants had obtained a Certificate in the Theory of Accountancy from one of the universities, they be required to pass a uniform final examination conducted by the Board. (Needless to say, this recommendation was accepted).

9.3 The Common Body of Knowledge Committee 1967—1969

In 1966 a Graduate Profession Sub-Committee was formed to consider how a graduate profession could be introduced in South Africa. This committee led to the formation of the Common Body of Knowledge Committee in March 1967, as it was
felt that the recommendations of the Graduate Profession Sub-Committee could not be based on possibly outdated educational standards.

The terms of reference of the Common Body of Knowledge were briefly as follows: to formulate the common body of knowledge required by newly-qualified chartered accountants; to define the knowledge and intellectual values which the newly-qualified chartered accountant will require to keep pace with future developments, which will form the basis for subsequent specialisation; to investigate and make recommendations on future relations between the profession and universities as well as other institutions of higher education; and note the possible effects the recommendations will have on the structure of the profession.  

The findings of this report included a definition of the future common body of knowledge required, and looked at the contents of syllabi in the following subjects: accounting, auditing, management controls, financing, profit-planning and investment decision making, company law, mercantile law and regulatory legislation, taxation, practical business economics, management, data processing and comprehension and communication.

The main recommendations of the Common Body of Knowledge Committee are reproduced verbatim below:

"1. Provisions should be made for a non-graduate candidate for the Certificate in the Theory of Accountancy to be able to attend at a university for a year on a full-time basis immediately prior to the period of practical training.

2. Consideration should be given to the substitution of accounting degrees for the C.T.A.

3. Greater emphasis should be placed on the positive training of entrants to the profession in addition to the provision of opportunity to gain practical experience.

4. Closer supervision by the Public Accountants' and Auditors' Board of training facilities is therefore desirable.

5. If greater emphasis is placed on positive training, the training period should be reduced from five to four years.

6. Under appropriate safeguards, practitioners' quotas for trainees should be extended by the Public Accountants' and Auditors' Board.

7. A second or junior tier of qualified accountants should be created which, although not allowed to practise as accountants and auditors, would be able to practise in subsidiary functions, such as secretarial and bookkeeping, which would be sufficiently qualified to relieve the chartered accountant of many of the routine tasks at present performed by him in a practice, in commerce and industry.

8. To qualify for the junior tier, a candidate should complete three years' service registered with the Public Accountants' and Auditors' Board in the office of a Registered Accountant and Auditor in public practice, but that this service may be transferable." 27)

The question arises, "What has been achieved in six years since the publication of the COBOK Report?" Accounting degrees are now being awarded by every university, and it appears that generally universities are recommending that prospective chartered accountants take a degree prior to a Certificate in the Theory of Accountancy. Many degrees are awarded on completion of the subjects required for the Certificate in the Theory of Accountancy. The training facilities of the profession have been examined and requirements have been changed. Quotas have been increased, during 1975 to a maximum of five clerks and a minimum of three, whereas previously these figures were respectively four and two. The profession has not found the recommendation, that a

27) Ibid., Part 2, par.5.
In the actual text reference is made to the relevant paragraphs of the detailed text in which the recommendations and their motivation are discussed in greater detail.
junior tier be created, acceptable.

9.4 Developments During the Seventies

In August 1970 a one-man committee was appointed to investigate the desirability of a National Society of Chartered Accountants (S.A.). The incumbent was L.F. Bowsher and he was further required to recommend the form a National Society should take if he made this recommendation. If he did not recommend a National Society of Chartered Accountants he was to investigate alternatives to make the existing structure more effective and more economical in its administration, and he could consider any related matters he thought necessary. Two reports were submitted by Bowsher. Bowsher did recommend the creation of a national society of chartered accountants under the name, The Society of Chartered Accountants (S.A.). The findings of the report are discussed in some greater detail elsewhere.28)

The Accounting Practices Committee was established in 1971, and the catalyst for the formation of this committee was the knowledge that new company legislation would require annual financial statements to fairly present the financial position of the company and the results of its operations in conformity with generally accepted accounting practice, applied on a basis consistent with that of the preceding year. The auditors would have the responsibility of reporting on such conformity.

Research in South Africa has been done mainly on a part-time basis and as far as possible publications of overseas institutes have been adapted to suit South African circumstances. The Accounting Practices Committee has compiled various exposure drafts, which, after publication and subsequent amendment are submitted to the Accounting Practices Board, which has been referred to above. The exposure drafts of the Accounting Practices Committee are given wide publicity, as not only members of the profession, but also all companies listed on the Johannesburg Stock Exchange receive these drafts. Copies are also submitted to the financial press.

28) For detailed discussions see pp.196/199.
In South Africa the National Council has decided not to opt for legislation to enforce generally accepted accounting practices, as this tends to lead to inflexibility which could inhibit the future development of accounting practices. This policy led to the formation of the Accounting Practices Board and the first meeting of the Accounting Practices Board was held towards the end of 1973.

The constitution of the Accounting Practices Board is of interest as representatives of the Stock Exchange, of the Chamber of Mines, of other organised commercial and industrial organisations, and members of the profession through National Council as well as representatives of the Public Accountants' and Auditors' Board serve on the Accounting Practices Board. It appears that all involved in financial transactions have some say in the acceptance of these pronouncements. It is further to be noted, as has been pointed out above, that the Accounting Practices Board does not draft the pronouncements as such, but after the acceptance of drafts by the National Council of Chartered Accountants (S.A.), which have been submitted by the Accounting Practices Committee, the Accounting Practices Board decides whether these pronouncements should be accepted. Two statements have been issued by the Accounting Practices Board and they are, "The Disclosure of Accounting Policies", and "Taxation in the Financial Statements of Companies".

In 1974 there were three interesting developments: South Africa joined the International Accounting Standards Committee as an associate member, the Accounting Development Foundation was formed and the Inaugural Meeting of the South African Society of University Teachers of Accounting was held during 1974.
South Africa is an associate member of the International Accounting Standards Committee and the opinions of this body will be examined with care, but it must be observed that the pronouncements of the Accounting Practices Board are still applicable in South Africa. No doubt, if there are major differences of approach between pronouncements of the International Accounting Standards Committee and those of the Accounting Practices Board, the latter will investigate the differences.

It has been stated that necessity is the mother of invention, and the Accounting Development Foundation was established early in 1974 in order to facilitate the research of the Accounting Practices Committee. Voluntary contributions by the members of the accounting profession and from listed companies will finance the Accounting Development Foundation. The Accounting Practices Committee, at the time of writing appears to have a substantial amount of work in research, which has to be finalised.

It is believed the structure of the controlling bodies of the profession in South Africa is very complex, and it is therefore necessary to look at these controlling bodies in greater detail, to determine what their functions are.

9.5 The Public Accountants' and Auditors' Board

The Public Accountants' and Auditors' Board was established in terms of Section 2 of Act No. 51 of 1951, which is now known as the Public Accountants' and Auditors' Act, as amended. The general powers of the Board are defined in Section 21 of the Public Accountants' and Auditors' Act and may be stated briefly as checking the regulation of service under articles of clerkship, conducting examinations for articled clerks, determining who the entrants to the profession shall be, prescribing the norms of conduct on the part of accountants and auditors registered in terms of the Public Accountants' and Auditors' Act and defining what will
constitute improper conduct. It not only has disciplinary powers but also is entitled to provide educational facilities for articled clerks and other persons desirous of becoming registered accountants and auditors.

The constitution of the Board is in terms of Section 3 of the Public Accountants' and Auditors' Act and four members are selected by the Minister of Finance. These members may be from the incumbents of the offices of Secretary for Inland Revenue, the Chairman of the Board of Trade and Industries, the Registrar of Co-operative Societies, the Registrar of Financial Institutions, the Registrar of Companies and the Master of the Supreme Court. Two representatives are nominated by the Committee of University Principals and they are either professors or lecturers in accounting or accountancy matters at any university in the Republic. Each provincial society is entitled to nominate one person and if the membership of the society exceeds 250 members it is entitled to nominate an additional member. Membership of the three provincial societies exceeds 250 with the result that provincial societies have seven representatives on the Public Accountants' and Auditors' Board. In terms of Section 3(d) of the Act, the Minister of Finance may appoint another member, who is resident in the district of Johannesburg or adjoining districts, after consultation with the other members appointed above.

There are various committees operating under the auspices of the Public Accountants' and Auditors' Board and they are the Executive Committee, Education Committee, Investigations Committee and Disciplinary Committee.

The membership statistics of the Public Accountants' and Auditors' Board as at 31 December 1975 indicate the following:

<table>
<thead>
<tr>
<th>Registered Accountants and Auditors -</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In Public Practice (Resident)</td>
<td>2741</td>
</tr>
<tr>
<td>Not in Public Practice (Resident)</td>
<td>815</td>
</tr>
<tr>
<td></td>
<td>3556</td>
</tr>
</tbody>
</table>
There were eighty-nine persons registered as non-resident accountants at 31 December 1975. There were 3418 articled clerks on register at 31 December 1975.\(^\text{29)}\)

### 9.6 Provincial Societies

There are four provincial societies in South Africa and they are: Transvaal Society of Chartered Accountants, established in 1904 by Act of Parliament. Cape Society of Chartered Accountants, established in 1907 as a company not for gain. Orange Free State Society of Chartered Accountants, established in 1908, as a voluntary organisation. Natal Society of Chartered Accountants, established in 1909 by Act of Parliament.

The main functions of the provincial societies are disciplinary and the registration of chartered accountants. It is to be observed that for a person to use the designation "Chartered Accountant (S.A.)", it is necessary that he be registered with one of the provincial societies of chartered accountants. Other functions of the provincial societies are the furtherance of the interests of members and students within a province, as well as the promotion of good external relations.

A development that has been fostered by the provincial societies has been the formation of regional associations to promote professional development, study and education, as well as to organise social and sporting activities on a regional basis. It is also hoped that the formation of these regional associations will give members in outlying areas a greater motivation to show a more direct interest in the affairs of the provincial societies and in the National Council of Chartered Accountants (S.A.). The number of

\(^{29)}\) Statistics supplied by Mr. L. Myburgh, assistant secretary of the Public Accountants' and Auditors' Board.
regional associations in each province is as follows:

Cape Province  4
Natal        1
Orange Free State  4
Transvaal   9

The membership of the various provincial societies at
31 December 1975 is detailed below:

<table>
<thead>
<tr>
<th></th>
<th>Members in Public Practice</th>
<th>Members not in Public Practice</th>
<th>Absentee Members</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cape Province</td>
<td>637</td>
<td>878</td>
<td>315</td>
<td>56</td>
<td>1886</td>
</tr>
<tr>
<td>Natal</td>
<td>383</td>
<td>627</td>
<td>247</td>
<td>58</td>
<td>1315</td>
</tr>
<tr>
<td>Orange Free State</td>
<td>105</td>
<td>24</td>
<td>62</td>
<td>-</td>
<td>191</td>
</tr>
<tr>
<td>Transvaal</td>
<td>1,538</td>
<td>1,984</td>
<td>623</td>
<td>107</td>
<td>4,252</td>
</tr>
</tbody>
</table>

The provincial societies have various committees and the
major committees are as follows: advisory committees,
education committees, disciplinary committees, investigation
committees and vacation school committees.

9.7 The National Council of Chartered Accountants (S.A.)

The first step towards unifying the accountancy profession
in South Africa was the formation of the Joint Council of the
Societies of Chartered Accountants of South Africa, which
came into force on 1 January 1946, by agreement among the four
constituent provincial societies. The name was changed to
"The National Council of Chartered Accountants (S.A.)" in
1966. All four provincial societies have representation

30) The abovementioned statistics are based on letters received
from the respective societies. The figures quoted above
may differ slightly from the final figures that may appear
in the annual reports of the societies, as these had not been
finalised at the time the letters were written.
on National Council and the individual representation is as follows:

Cape Province 4
Natal 3
Orange Free State 2
Transvaal 9
TOTAL 18

The National Council has no disciplinary powers as these are vested in the Public Accountants' and Auditors' Board and the provincial societies. Chartered Accountants in South Africa are not directly members of The National Council of Chartered Accountants (S.A.), as they are members of the provincial societies.

The functions of the National Council detailed below are:

(a) To co-ordinate the activities between provincial societies.
(b) To advise provincial societies on various matters.
(c) To be responsible for internal and external public relations, and to liaise with government and provincial departments; to represent the profession concerning any matters or legislation which may affect the accountancy profession.
(d) To develop the profession and to encourage a high standard of professional and general education.
(e) To be responsible for issuing statements on accountancy and auditing matters.
(f) To provide research into accounting, auditing and other professional matters. However a substantial amount of research is done on a voluntary basis.
(g) To publish the monthly journal, The South African Chartered Accountant.
Many other functions are performed by the National Council and the detailed list of the committees indicates that the National Council does endeavour to look after the interests of the profession. The committees are: Accounting Practices Committee, Auditing Standards Committee, Company Law Committee, Courses Committee, Education Committee, International Congress Committee, Library Committee, Liquidations and Insolvencies Committee, Management Advisory Services Committee, National Society Committee, Parliamentary and Law Committee, Public Relations Committee, Supplementary Practical Training Committee, Taxation Committee, Uniformity of By-Laws, Rules of Professional Conduct etc. Committee. There are joint committees with the Public Accountants' and Auditors Board, namely the Combined Membership List Committee, the Education Task Committee and the Training of Non-Whites Committee, Claims for Negligence Committee.

National Council has representation on the Accounting Practices Board. It is interesting to observe that one of the committees of National Council is the National Society Committee. One of the objects of National Council is the ultimate formation of a national body, i.e. a National Society of Chartered Accountants. This matter is discussed in greater detail below.

The Accounting Development Foundation was established by National Council and the affairs of the Accounting Development Foundation are controlled by three trustees. Its object is primarily to support and promote research and education. The affairs of the Accounting Development Foundation are administered by The National Council of Chartered Accountants (S.A.). The National Council of Chartered Accountants (S.A.) is financed by a levy on the provincial societies.

9.8 The Accountancy Profession in South Africa 1975 / 1976

A trite observation indeed is that the challenges to the profession in the next decade will be great. A vexed problem facing the profession in South Africa is the shortage
of manpower. The manpower situation within the profession has deteriorated quite dramatically during the last fifteen years. In a very interesting analysis, A.P. Zevenbergen investigates the possibility whether the profession in South Africa does have additional scope to render the much-needed management advisory services for the small firm. Zevenbergen states that he has serious doubts whether the profession will have the necessary manpower to be able to render management advisory services to the small firm.\(^{31}\)

In his analysis of the possible reasons for this critical staff position, he sees the following factors contributing to the situation: the growth of the economy in the country over the past few decades has greatly increased the demand for the services of the public accountant and auditor; an additional burden has been placed on the accountancy profession because of the promulgation of new company legislation, namely, The Companies Act 1973; the avenues of employment open to the chartered accountant in commerce, industry, finance, education and other spheres have drawn many accountants away from practitioners' offices; the number of new entrants to the profession has not been sufficient to meet the demands of all the interested parties.\(^{32}\)

In substantiating his arguments, A.P. Zevenbergen has compiled some very interesting statistics, extracts of which appear in Table Number 1. These statistics have been updated to reveal the situation as at 31 December 1975.

An analysis of extracts of the statistics prepared by A.P. Zevenbergen reveals a disconcerting picture. If the index figure for the number of companies is taken as 100 in 1960, we find that the comparable index figure at the end of 1975 is 303. If the number of accountants in 1960 is taken at an index of 100, then the comparable index in 1975 is 166. The number of companies has increased from approximately 64000 to more than 194000 at the end of 1975. It is to be observed that the number of companies has increased by approximately 200% whereas the number of

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32) Ibid., pp.19/22.
registered accountants has only increased by 66%. There has thus been a complete disparity between the rate of growth in the number of companies and the rate of growth of registered practising accountants. It appears that approximately 24000 companies may have been dormant at 31 December 1975. This is based on the fact that only 164417 companies submitted returns during the year ending 31 December 1975, and taking the formation of new companies during the said period into account, namely, 4789, it may be assumed that the number of active companies at 31 December 1975 is approximately 170 000.\(^{33}\) This represents a growth of approximately 166% during the relevant period, whereas the number of accountants increased by 66% only. In 1973 and 1974 there was a net decrease in the number of companies, and this may be attributed to the fact that it is an expensive operation to keep a dormant company registered. This can also be attributed to the fact that the number of de-registrations has increased considerably and the years 1976 and 1977 will no doubt show a substantially larger number of de-registrations. It is very much doubted whether the volume of work on the shoulders of practising auditors will be reduced substantially by the fact that as many as 24000 companies may be de-registered during the next few years. If these companies were dormant anyway, the volume of work appertaining to them would not have been substantial, although the secretarial duties may have taken up considerable time. It appears that many companies have not lodged these forms and it may be assumed that these companies will thus be de-registered.

It appears that the commercial, industrial and financial world is a very lucrative field of employment for chartered accountants and there can be no doubt that the practitioner's office is a major training ground for financial personnel in the commercial, industrial and financial world. It is very disconcerting to observe that of the 4534 successful candidates in the Final Qualifying Examination of the Public Accountants' and Auditors' Board for the years 1961 to 1975, only 1905 registered with the Public Accountants' and Auditors' Board as practising accountants, representing 42% of the successful candidates. The percentage of successful candidates ending up in public practice is no doubt higher.

\(^{33}\) Information furnished by the Office of Companies, Mr. O.T. Schoeman. See Table No. 1.
as many employees with public accounting firms do not register with the Public Accountants' and Auditors' Board. It appears that the perks offered by commerce, industry and the financial world will no doubt still be attractive to the chartered accountant, and the prospects for an immediate improvement in the situation are rather bleak as the increase in the number of articled clerks, (trainee accountants) has not been substantial during the last few years. In 1975, however, there was a net increase of 196 trainee accountants. The position should improve further as a result of the increased quotas allowed by the Public Accountants' and Auditors' Board with effect from 1975. An analysis of the number of articles of clerkship cancelled, reveals a disconcerting picture, although it is acknowledged that the position has improved during the last fifteen years. During 1961, 615 articles of clerkship were registered, whereas 139 were cancelled, representing 22.6% of new registrations. There appears to be an improvement in the situation as this percentage during 1975 represented 16.4% only. (164 out of 1001 new registrations.)

The profession faces a great challenge to attract many more entrants and it is acknowledged that this will be a very difficult task, as all the professions are trying to get the top-quality students into their professions. Zevenbergen refers to statistics, published by the Human Sciences Research Council, which show that the accountant and auditor is ranked fourth out of twelve professions, according to median income. The first three places are occupied by the medical specialist, medical practitioner (general) and the engineer respectively. These statistics were as at 1 March 1973.34) Chartered accountants working as employees are ranked sixth out of twelve professions cited in the study.35) The profession must accept that commerce, industry and the financial world will always attract a large


35) *Loc. Cit.*
proportion of the candidates who succeed in the Final Qualifying Examination. The chartered accountancy profession must endeavour to improve its image and also a large source of recruits for the profession has not yet been tapped. According to latest statistics the ratio of Afrikaans to English speaking is approximately 60 to 40 whereas it is estimated that the ratio of English to Afrikaans-speaking chartered accountants is 85 to 15. Therefore the profession must endeavour to contact the Afrikaans-speaking matriculants and Afrikaans-speaking graduates. A very disturbing fact is that at one or two universities fewer than 5% of the students who enroll for Accounting I eventually end up in the terminal course in Accounting. Thus it is obvious that a substantial amount of public relations work will have to be done by the profession to persuade many scholars and students that the designation Chartered Accountant (S.A.) is an attainment worthwhile achieving.

Table No.: 1.
Comparative Statistics Appertaining to the Accountancy Profession for the Period 1960 - 1975

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statistics According to Indices</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Companies</td>
<td>100</td>
<td>147</td>
<td>250</td>
<td>303</td>
</tr>
<tr>
<td>Registered Accountants and Auditors in Public Practice</td>
<td>100</td>
<td>111</td>
<td>138</td>
<td>166</td>
</tr>
<tr>
<td>Trainee Accountants</td>
<td>100</td>
<td>112</td>
<td>133</td>
<td>164</td>
</tr>
<tr>
<td><strong>Actual Numbers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Companies</td>
<td>63961</td>
<td>93773</td>
<td>159666</td>
<td>±194000</td>
</tr>
<tr>
<td>Registered Accountants and Auditors in Public Practice</td>
<td>1651</td>
<td>1828</td>
<td>2278</td>
<td>2741</td>
</tr>
<tr>
<td>Trainee Accountants</td>
<td>2088</td>
<td>2337</td>
<td>2771</td>
<td>3418</td>
</tr>
<tr>
<td>Number of Registered Articled Clerks per Registered Accountant</td>
<td>1,26</td>
<td>1,28</td>
<td>1,22</td>
<td>1,25</td>
</tr>
</tbody>
</table>

Table No.: 1 continued - Other Statistics

Final Qualifying Examination

Total number of entrants for the years 1961 - 1975 8833
Number of successful candidates 4534
Percentage successful 51.3%

Registrations as Registered Accountants and Auditors

Number of new registrations as practising accountants and auditors for the period 1961 to 1975 1905

Number of Companies per Registered Practising Accountant

71 39

Number of Companies per Practising Accountant on the Assumption that Active Companies Total 170000 62

Percental Comparison of Number of Articles Cancelled to New Registration

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of articles of clerkship cancelled</td>
<td>139</td>
<td>136</td>
<td>125</td>
<td>164</td>
</tr>
<tr>
<td>Number of New Articles of Clerkship registered</td>
<td>615</td>
<td>600</td>
<td>725</td>
<td>1001</td>
</tr>
<tr>
<td>Percentage</td>
<td>22.6%</td>
<td>22.7%</td>
<td>17.2%</td>
<td>16.4%</td>
</tr>
</tbody>
</table>

9.9 Rationalisation of the Controlling Bodies of the Profession

It does not need a very intelligent person to conclude that the structure of the profession is indeed very cumbersome. The present structure, namely the Public Accountants' and Auditors' Board, The National Council of Chartered Accountants (S.A.), four provincial societies together with regional societies, typifies a sense of provincialism, which in the long term cannot be beneficial to the profession itself and is not in the best interest. It is averred
that a very small minority of chartered accountants in South Africa really know what the true functions of the various organisations are. The present structure of controlling bodies, which appears to have come about because of certain compromises, may have served its purpose.

The National Council of Chartered Accountants (S.A.) decided in August 1970 to appoint Mr. L.F. Bowsher to investigate the desirability of a National Society of Chartered Accountants (S.A.). If he was in favour of this, he was to recommend the form such a national society should take. If he was not in favour of such a recommendation, he was expected to review the existing structure of the profession in South Africa and recommend alterations to make it more effective and to reduce the costs of administration. The terms of reference concluded with an instruction that he consider any related matters that he may deem desirable.\[36\]

Two reports were published, namely, the main report during August 1971 and a supplementary report during January 1972, which dealt mainly with the desirability of a federal basis as opposed to a unified basis for the profession.

The synopsis of the Bowsher Report gives the arguments for and against a National Society. The arguments for a National Society, briefly are:

(a) The present size of the profession (1976 approximately 7200) cannot justify the retention of the structure of four autonomous provincial bodies.

(b) The report further asserts that provincial boundaries do not necessarily constitute natural and suitable units with common interest, and that when national issues are studied, provincialism sometimes does cloud the issue.

(c) It is felt that if members were elected by direct voting of members, instead of the present nominees from the provincial societies, a national society would be received more enthusiastically.

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(d) An anomalous situation arises in that a smaller society could effectively veto any necessary amendments in the bye-laws of the other societies. The statistics of the membership of the different provincial societies do reveal a greater disparity in the membership of the various provincial societies.

(e) The subscription rates differ quite substantially in the various provinces.

(f) It is affirmed that the fear of domination, especially by the urban areas of the Transvaal, can be overcome by the drafting of a proper constitution.

(g) It is further stated that the formation of a national society should strengthen the profession greatly, provided that a strong secretariat is established and maintained for the central body, and that the regional associations are supported and stimulated by the body of members.

(h) Before the ultimate unification of the profession can be considered, that is that all the controlling bodies including the Public Accountants' and Auditors' Board, are unified to form one controlling body for the profession, it is necessary that a strong national society be formed as an intermediate step, to assist in the achievement of ultimate unification; it is further maintained that a federal basis will prolong the present expensive set-up.37)

The Bowsher Report then examines and summarises the arguments against a change, as follows:

(a) The provincial societies do have a beneficial influence in that they hold members together.

(b) Members tend to lose interest in the affairs of the profession if it is controlled by a remote body.

(c) It is averred that the unification of the profession will not result in a saving in administration cost, as regional associations will need funds for their secretariates.

(d) It is maintained by advocates of the status quo that the task of the National Council is lessened because of the present work done at provincial level, and the disappearance of provincial societies, it is submitted, will render the task of an executive committee of the controlling body very onerous indeed; it is further felt that the present National Council effectively represents the profession on a national basis.\textsuperscript{38)}

The question, why the structure of the national controlling bodies of the profession is discussed in a thesis on accountancy education, may be posed. There are far too many education committees for this profession. The Public Accountants' and Auditors' Board, The National Council of Chartered Accountants (S.A.) and provincial societies and some regional associations have education committees. There appears to be overlapping of interests between certain of the committees, as well as a lack of co-ordination on a country-wide basis as to what the approach to accountancy education should be.

Although it is not the aim of this thesis to investigate the arguments for and against, in detail, it is believed that a very important argument in favour of the rationalisation of the controlling bodies of the profession has been overlooked in the Bowsher Report, and that is public interest. The profession must ask itself whether it is serving the best interests of the profession as well as the best interests of the public. It is a trite observation that the chartered accountant does have a duty towards "John Citizen" and one wonders whether the present complex system of controlling the profession is in the best interests of the profession as well as in the public interest. It appears that the decision-making process within the profession, because of the present structure, is very long and clumsy. It is imperative that the profession move with the times, and it is sincerely believed that members of the profession must not think simply of the immediate future, but plan now for the late 1980s and early 1990s.

\textsuperscript{38)} \textit{Loc. Cit.} par. 7.
There is always a natural tendency to resist change. If what is born, is in the long term not only in the interests of the profession but also in the interests of the public, a change of attitude is indeed necessary in those persons controlling the profession in the Republic of South Africa. Without casting aspersions on members of the councils of the various provincial councils of chartered accountants, it may be submitted that a direct channel of communication between regional associations and a national body could have fruitful results. This is recommended because a constructive suggestion made by a member of a regional association to the provincial society may be rejected by the powers that be, not withstanding the fact that it may be in the best interest of the profession nationally.

Mr. Bowsher recommended the formation of a national body, named, "The Society of Chartered Accountants (S.A.)", which would take control of the assets and liabilities of the provincial societies as well as those of National Council. This would result in the dissolution of the provincial societies. He also recommended that a referendum be held to guage members' feelings, and suggested if a national society be established, it be a voluntary association, or a company in terms of Section 21 of the Companies Act. The recommendations also included a suggested scheme of representation for the various regions. Out of a total of 15 representatives, Cape Western and South West Africa would have three, Johannesburg four, and Natal coastal region two. It may be stated that these regions, together with some of the other Transvaal representatives could dominate the profession. It is believed that responsible persons will be elected to such a national body, and as they represent by far the greatest number of chartered accountants in South Africa, it would not be entirely undemocratic for the few regions to control the profession.

The importance of a national society is examined by the present chairman of The National Council of Chartered

39) Ibid., p.3.
Accountants (S.A.). Mr. M.R. Lindhorst states in this regard:

"I believe that the time has come for us to effect changes in the structure of the Profession which at present is unnecessarily complicated and, with good reason, not readily understood by many members.

The existing system is open to much duplication of effort which is proving a costly waste in manpower hours and I am convinced that with a certain amount of goodwill we can agree a formula for integration which will be acceptable to all Provincial Societies and Regional Associations. The profession is on a fast upward trend and we must now consider streamlining operations and decide on a structure which will prove effective in decision-making processes and assist those entrusted with the administration of the profession.

There is also the question of finance to be considered. Members are well aware of the fact that administration of the profession is becoming increasingly costly. The formation of a National Society should effect a saving in this sphere.

... It is my firm opinion that the climate is changing and that responsible members are once again thinking seriously of unifying the profession. We should also work in ever-closer liaison with the Public Accountants' and Auditors' Board. Given fair representation on that Board, I can see no problem being encountered which would not enable us to fit into the overall framework of a unified profession. The outgoing Chairman of National Council, in his valedictory speech, supported this view."40)

A former president of the Transvaal Society of Chartered Accountants, P.C. Nel, had this to say about the structure of the controlling bodies of the profession:

"... During my travels over this past year I was unable to find many people who could lucidly and authoritatively explain to me the exact workings and structure of our profession in this country through the medium of Provincial Societies, National Council and the P.A.A.B.

... I am reiterating previous requests and injunctions that serious consideration should be given to greater co-ordination and unification

of the profession through the establishment of a National Society. Recent mergers of many auditing firms throughout the country indicates, I believe, that provincial barriers have not only been overcome but that it is both desirable and beneficial to those concerned that they should be overcome." 41)

It is interesting that the executive committee of National Council is presently revising the synopsis of the Bowsher Report, and it appears that National Council is committed to the establishment of a National Society, in terms of a resolution passed at a meeting on 7 March 1972. In the questionnaire sent to chartered accountants in South Africa, a question was posed about the structure of the controlling bodies.

Table No.: 2.
Analysis of Responses to Question 21

"How do you envisage the structure of the controlling bodies (or organisations) of the profession 10 years hence?

a) As presently structured, consisting of the Public Accountants' and Auditors' Board, The National Council of Chartered Accountants (S.A.), provincial societies and regional associations.

b) The Public Accountants' and Auditors' Board, a national society of Chartered Accountants (S.A.) and regional associations.

c) One national statutory controlling body together with regional associations.

d) Other"

No Opinion

<table>
<thead>
<tr>
<th>PERCENTUAL ANALYSIS OF RESPONSES</th>
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<tbody>
<tr>
<td>17,4%</td>
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<tr>
<td>32,0%</td>
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<tr>
<td>46,7%</td>
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<td>0,6%</td>
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<tr>
<td>3,3%</td>
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<td>100,0%</td>
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This question has caused a fair amount of controversy as certain members of councils of provincial societies took exception, asserting that their members were not fully informed.

on the full implications regarding the matter. It was further stated that the wording "How do you envisage the structure ... 10 years hence?" does not indicate how members would like to see the structure of the controlling bodies 10 years hence. It is believed that the responses to the questions, as Table Number 2 indicates, counter both arguments.

It is significant that only 17.4% indicated a preference for the status quo, whilst 3.3% did not express an opinion. Assuming that the 3.3% do not want change, it still means that only 20.7% favour the status quo. 32.0% and 46.7% are in favour of alternatives (b) and (c). It is very significant that 46.7% favour the formation of one national statutory controlling body together with regional associations, notwithstanding the allegations that the members may possibly have been uninformed about the issues involved. The signs are clear that the members do wish that some form of rationalisation of the controlling bodies should be effected.

It is significant that an analysis of responses according to all criteria, used indicates that all groups prefer one national statutory controlling body with regional associations. 42)

9.10 Conclusion and Recommendation

The abovementioned analysis must make it emphatically clear that the time is possibly right for a re-structuring of the controlling bodies of the profession. The formation of a National Society may be an interim step in achieving the ultimate step of true unification. Many members interviewed believe that this is supreme optimism, and that although nearly all of them favoured the formation of a national society or one national controlling body they could not see this materialising in the next decade.

It is believed that the time is ripe that chartered accountants, holding the responsible offices in the provincial societies, 42) For detailed statistics see Annexure B.17.
must not lose sight of their responsibilities, must cast aside their prejudices resulting from provincialism, and most of all must bear in mind that if the formation of a national society results in the improvement of effectiveness of the profession, a national society and ultimately one controlling body must be formed. It is time that the winds of change affected the profession in South Africa, as the last quarter of a century has seen no significant change in the structure of the controlling bodies, and most of all, what is best in the public interest must be considered. It is time that the profession stopped thinking in the past and worked rapidly for the future. The importance of public interest cannot be stressed sufficiently and it is sincerely hoped that this will motivate the leaders.

It is therefore recommended that the implications of the complete rationalisation of the controlling bodies of the profession be examined in detail, and that the opinions of the members be tested in this regard by a referendum. However, if the complete rationalisation is not found feasible, the formation of a national society be encouraged as an intermediate step in achieving the ultimate aim of a unified profession in the true sense of the word. It is feared that if the latter suggestion is found acceptable at least another quarter of a century or longer will have passed before another rationalisation is effected.
CHAPTER 10
ACCOUNTANCY EDUCATION AND TRAINING IN SOUTH AFRICA

10.1 Requirements for the Professional Qualification

The studying and examinations leading to the Chartered Accountant (S.A.) designation, which is highly cherished, is considered to be difficult by many candidates. Of late much criticism has been expressed about the length of time and the difficulty in attaining this qualification. A brief review of the educational requirements and practical-experience requirements is necessary. The application of the C.A.(S.A.) designation in practice seems to cause its fair share of problems and complexities.

The final qualifying examination is set by the Public Accountants' and Auditors' Board and the person who wishes to practise as a public accountant and auditor, may do so if he has successfully completed the final qualifying examination as well as the practical experience laid down by the Public Accountants' and Auditors Board. It is essential that he register with the Public Accountants' and Auditors' Board as a practising accountant. This, however, does not entitle him to the use of the designation, Chartered Accountant (S.A.). He is entitled to the use of the designation C.A.(S.A.) only if he has registered with one of the provincial societies of chartered accountants in South Africa.

The Certificate in the Theory of Accountancy, or its equivalent, is awarded by participating universities that have contracted with the Public Accountants' and Auditors' Board in terms of the Accountants' Clerks University Education Scheme.\(^1\) Another requirement is that the clerk must have served a minimum period of practical experience (articles). The practical-experience requirement is five years for a matriculant and three years for a graduate. A remission of three months is granted for military service.

\(^1\) For a list of participating universities see Annexure E.
South African universities have played a major role in the education and training process of chartered accountants in South Africa. The curricula of the various universities are very diverse as a summary thereof reveals.2) The different qualifications offered by the universities are Bachelor of Computationis, or Bachelor of Accounting, Bachelor of Commerce (Honours), followed by a Certificate in the Theory of Accountancy or simply a plain Certificate in the Theory of Accountancy or Bachelor Rationalium.

The period required to achieve the various degrees differ quite substantially. A few universities offer candidates a four-year full-time Bachelor of Commerce (Honours) degree. Graduates of these universities have been given special permission by the Public Accountants' and Auditors' Board to write the Final Qualifying Examinations earlier than is normally permitted. This will be done on an experimental basis until 1978, when the temporary ruling will be reviewed. Some graduates take six years on a part-time basis to complete a Bachelor of Accountancy degree. Other universities offer a three-year part-time course for a Bachelor of Commerce degree. A fourth year will lead to a Bachelor of Commerce (Honours) degree and at the end of the fifth year a Certificate in the Theory of Accountancy is awarded. The anomalous situation arises that at one university students can complete a four-year full-time Bachelor of Commerce (Honours) degree, and at the same university a Certificate in the Theory of Accountancy may be completed on a four-year part-time basis. This approach within one department is found incompatible. It is submitted that although these part-time students may possibly successfully complete the present Final Qualifying Examination, reservations are expressed whether they have been educated in the true sense of the word.

An analysis of the curricula of the various universities shows that certain curricula are very technique-oriented, whereas others are more management oriented, in the sense that a major in business economics is required. The exposure

2) For detailed comparative summary see Annexure G.1 and G.2.
of candidates to subjects such as economics and business economics is rather limited.

During 1966, Richard G. Wuth expressed an opinion that the education of the chartered accountant, after the implementation of the five-year part-time courses was still heavily loaded with specialist subjects and

"it cannot be expected to make any real contribution to the broad catholic education of those who take it."

He then refers to the early specialisation and states:

"Many educationalist argue that too much specialisation in the early stage of study has the effect of stultifying mental development and produces students with a false idea of attainment and lack of desire to apply themselves to further study." ³)

It is submitted that notwithstanding the introduction of most of the COBOK suggestions, the present syllabi are too technique-oriented. A review of the curricula at various universities reveals a dearth of broadening subjects. Accepting the time constraints, it is submitted that greater exposure to certain aspects of management, and greater exposure to economics could be fitted into the present curricula and this will have a broadening effect.

10.2 The Practical-Experience Requirement

In terms of section 21(c) of the Public Accountants' and Auditors' Act, the Board has the power to regulate service under Articles of Clerkship. In terms of section 24(1) of the Public Accountants' and Auditors' Act it is necessary that articles of clerkship be registered with the Public Accountants' and Auditors' Board, and the principal must also obtain the necessary consent of the Board to engage a clerk under articles. A chartered accountant in public practice must submit information to the Board proving that the practice can give the clerk a sufficiently wide and general practical-training and experience. In terms of section 24(1) of Act No. 51 of 1951, a principal is required to furnish

information on the nature of his practice and specifically on the type of work performed in his practice which is divided into five categories.

An analysis of the five categories reveals the following:

a) Category A work can basically be described as pure auditing, as the client prepares the financial statements and only an audit is required; alternatively the client writes up the books and the accountant is required only to balance the books, make adjusting entries, closing entries and draft the final accounts. The accounts would still basically require an audit and this does not entail the routine accounting work.

b) Category B work includes the write up of books, as well as the preparation of final accounts and the reporting thereon. (The nature of this work requires a qualification in terms of section 26(1) of the Public Accountants' and Auditors' Act, to the effect that the public accountant and auditor was also responsible for writing up the books).

c) Category C work applies only where the applicant is responsible for writing up books of clients and the audit is performed by another practitioner. If secretarial, besides accounting work is also required, this is included under category C.

d) Category D work requires secretarial work only and no write up work is involved. Appointments such as executorships, liquidations, trusteeships, completion of income tax returns, investigations, prospectuses and management services are all to be included under this section.

e) Category E refers to supplementary practical training, as distinct from on-the-job training. Supplementary practical training is defined as:

"All forms of training in addition to formal university education whilst under Articles of Clerkship by way of formal lectures, sessions or any other means so as to equip a clerk for his role as a professional accountant." 4)

4) Public Accountants' and Auditors' Board, Form 30, p.2.
The Board requires various analyses of the present number of articled clerks and a break-down of the number of hours spent on the various work categories as defined above. The number of partners and staff at the office, as well as the anticipated number of clerks at the office, in the event of the application being successful, is required, with an estimate of the number of hours for the ensuing year which are to be allocated to the various work categories. The Board also requires a summary of the number of hours spent the previous year on supplementary practical training of all articled clerks on the following: organised lectures; individual discussions with clerks; case studies or test papers; other, which must be specified.

A description of the practice at which clerks will be employed must be given and must show the following: number of appointments to be detailed in various categories, which categories are: public companies, co-operative societies, private companies, other corporate bodies registered under statute, charitable, religious and similar, partnerships and individuals. The total estimated fee income is also to be indicated.

For each category the total annual chargeable hours are to be broken down into the various work categories A, B, C and D.

The norms by which quotas are allocated are confidential to the Board and are not published. It must be assumed that the exposure to work category A must be critical in the decision whether to allow a quota of clerks.

The recommendations of the Common Body of Knowledge Committee have been accepted by the Board, and stricter control over quotas of articled clerks has been established. In future quotas of articled clerks will be established separately for partners in each office of a practice, and not on a general basis. The introduction of a triennial review of all offices, where articled clerks are employed, took effect
from 31 December 1975. If information furnished reveals an unsatisfactory situation, the Board is entitled to call for more information. This triennial review is to be commended, and the hope is expressed that the necessary action will be taken where deficiencies are discovered.

It is essential for the future public accountant and auditor to have sufficient exposure to category A work, as well as a fair spread of exposure to work in the categories B to D. It has been stated that a schism exists in accounting practices in all parts of the world, and it is submitted that in large firms the clerk is basically exposed mainly to category A work with very little work in other categories. In the smaller firms the clerk will have exposure to categories B, C and D but the exposure to category A may leave much to be desired.

As stated elsewhere, for the practical-experience requirement to be meaningful, it is essential that the quality of practical experience be rigorously controlled. It is, therefore recommended that the Public Accountants' and Auditors' Board establish an accreditation board, similar to the Accreditation Board of the Institute of Chartered Accountants in England and Wales. This accreditation board interviews principals and enquires about auditing standards and procedures. Members of the board may pose any questions they deem necessary prior to granting the chartered accountant the right to employ trainee accountants. It is recommended that the South African accreditation board or committee have the same powers, as the right to inspect any documentation with regard to its practice, and to examine complaints lodged by trainee accountants, who may possibly be receiving inadequate training. It is further recommended that free transferability be allowed, so that the marketplace will determine which firms are giving quality experience. It is suggested that there be one constraint, namely that periods of less than six months will not be recognised as complying with the practical-experience requirements. A very important question to be decided by the profession is whether articles of clerkship or a service contract is really necessary.
A perusal of the articles of clerkship indicates the principal has many noble intentions. The same applies to the clerk. The principal gives certain undertakings, which, judging by complaints mentioned by students, are very difficult to execute; similarly the student gives certain undertakings which in practice prove to be impracticable.

An examination of paragraph 1 of the Articles of Clerkship indicates that the principal, or his partners, undertakes to educate a clerk under personal supervision. Paragraph 1(b) states their remuneration shall not be less than certain sums. It is submitted that, whereas in the past articulated clerks were always regarded as cheap labour, the market place decides what should be paid. Clause 1(d) states that the principal agrees that the clerk will be trained and instructed in the practice and profession of a registered accountant and auditor including proper instruction in professional standards and ethics. It is submitted that many firms do not have the facilities to give this instruction. Clause 1(e) refers to the principal allowing a clerk all the facilities for regular attendance at lectures and tutorial classes. It is again submitted that many principals do not comply with this requirement because clerks are sent out to country areas when they have to attend lectures, and in many instances are not in the position to write tests. Clause (g) of paragraph 1 states that the principal will allow a reasonable period of study leave immediately prior to the examination the clerk is required to write. Judging from comments of students, the study leave granted by various firms differs greatly. Some students are fortunate if they have study leave of one day per subject, which may give them a total of a week's study leave, whereas other students are given three weeks' study leave. It is suggested that this clause depends on one's interpretation of a reasonable period. From the abovementioned comments, it is seen that many of the intentions are very noble in theory but are difficult to execute in practice. The validity of putting down these noble intentions on paper, is questioned.

5) Public Accountants' and Auditors' Board, Articles of Clerkship.
An analysis of the undertakings by the clerk also reveals many noble intentions such as that he will diligently pursue his studies in the theory and practice of the profession of registered accountant and auditor. It is submitted that these intentions, noble as they are, in many cases will not apply. The abysmally poor test results of candidates may be because the students have to work during the day and study part-time, or alternatively because the students are not disciplining themselves. Many other undertakings by the clerk are very noble indeed, but it is submitted that when the clerk puts his pen to paper it does not ensure that he will abide by this agreement in which he undertakes to maintain certain ethical standards. It is submitted that the same result could be achieved if the supplementary practical training programmes of firms inculcated a feeling of loyalty and integrity. Integrity is also affected by the home environment. It is therefore submitted that articles of clerkship are redundant and an employment certificate should suffice to ensure the necessary control. Firms can also submit half-yearly returns which will reflect the names of trainee accountants who are employed by the firm and who are in the process of completing the practical-experience requirement. Firms must submit duplicates of employment certificates annually to the Board. This will ensure additional control, as upon registration the employment certificate of the trainee accountant can be double checked. Further, to ensure that malpractices will not arise, all approved employers will have to display the necessary regulations with regard to the practical-experience requirement. It is further submitted that these regulations should contain the entry requirements and, in the event of a student being unsure of the requirements, he be entitled to approach the Public Accountants' and Auditors' Board directly.

It is disturbing to observe that in the past so many articles of clerkship have been cancelled. In 1975, 164 articles of clerkship were cancelled, whilst 1,001 new articles of clerkship were registered. It has been stated that the cancellations occur because matriculants prefer to change to full-time study. This trend is to be welcomed,
but it is disturbing that prospective accountants waste time before deciding to study full-time. It is submitted that many accountants advise school-leavers to study on a part-time basis and it is suggested that this advice is given out of self-interest and possibly out of ignorance.

10.3 The State of Accountancy Education in South Africa

It has been stated that the South African universities have made a substantial contribution to accountancy education in South Africa. The question that arises is: How effectively are the universities in South Africa educating the accountant in South Africa? It may be stated that the winds of change are affecting accounting academics at universities in South Africa, and they are thinking seriously about their approach to the teaching of the subject.

The fact that accountancy education has been discussed so often at workshops and other get-togethers of Provincial and Regional Societies, does indicate that the profession is concerned with education, and it also appears that members of the profession are not entirely satisfied with the approach of certain South African universities. An examination of the viewpoints of academics as well as those of practitioners should be fruitful.

An academic, W.A. Joubert, recently questioned the professional-oriented approach in an address entitled: "Is the new C.A. adequately equipped for his Role in Society?" Joubert questions the validity of the present system of articles in that the quality of the office training, which the future chartered accountant might receive, is not particularly relevant to obtaining the C.A. qualification. He maintains further that the "education" of the prospective accountant is too profession-oriented, in the sense that from the first year he is taught subjects that are useful to him in the office environment, but in effect this usefulness is the greatest shortcoming in the long term. He further asserts that there

is insufficient mathematics, economics and behavioural sciences in the curriculum for the future chartered accountant. He does not favour the use of a case study as such, but admits to being forced to teach it to ensure a reasonably successful percentage in the final qualifying examination. He favours a more conceptually-oriented approach as he finds it difficult to simulate the working environment in a classroom. He makes the statement, in no uncertain terms, that universities have been degraded to high schools for technical education.

Another observation made by Joubert is that the decision-making process within the profession, as well as the implementation of such decisions takes too long.

An academic, P.J.C. Seneque, has observed that the education of accountancy students at South African universities has been too technique oriented, instead of being critical and analytical. 7)

Douglas Garbutt, another academic, questions whether accountancy academics should collaborate in creating or maintaining a monopoly for any one body. He is in fact questioning whether accountancy academics should be involved only with the educational scheme of the Public Accountants' and Auditors' Board and states:

"A point which must be made is that a university must take a much longer time-horizon in deciding the problems to which its staff must address themselves. ... Their concern must be with human knowledge and the full range of situations in which that knowledge may be applied: government, industry, commerce, as well as the more limited fields of professional practice. While they properly co-operate with the professional bodies, they should not collaborate in creating or maintaining a monopoly with any one such body." 8)

Garbutt questions the value of practical experience and states in this regard:

"Can the unstated assumption that everyone calling himself an accountant must have three to five years experience in a

7) Seneque, P.J.C., Accounting: A Social Discipline in Transition, inaugural address delivered at the University of Natal, Durban, pp.16/17.
professional office really be supported by argument and evidence? and, if it cannot, should the universities not lead the profession into dropping it?" 9)

It has been stated elsewhere that the Final Qualifying Examination has had a detrimental effect on the teaching of accountancy at the various universities. This is because the proficiency of a university lecturer is measured by the success of his candidates in the Final Qualifying Examination of the Public Accountants' and Auditors' Board. It is further submitted that the Final Qualifying Examination has resulted in the application of double standards at universities, depending on whether a candidate is going to write the Final Qualifying Examination of the Public Accountants' and Auditors' Board. This statement must be qualified in that it may not be the case at all universities. There can be no doubt that the Final Qualifying Examination has resulted in the approach at universities becoming more technique-oriented. This can only be detrimental in the long run. It is submitted that the form of the Final Qualifying Examination will have to be changed, and this could possibly lead to a more conceptually-oriented approach to the teaching of accountancy at South African universities.

The view, that South African accountancy education has been too technique-oriented, can be concurred with and also that a de-emphasis of techniques is required, and emphasis be placed on the reading of journals and books so that a better balance may result between the teaching of concepts and techniques.

Many complaints have been levelled at accountancy academics and some are: accounting academics are out of touch with the modern auditing techniques; accounting academics, too obsessed with their own ego, fail far too many students to ensure that they perform well in the Final Qualifying Examination. Other indications are that graduates do not know how to write up a set of books. In the discussion of a

9) Ibid., p.282.
conceptual approach it has been pointed out that practitioners have thrown up their arms in horror, because the students are not proficient in doing bank reconciliation statements and balancing cash books. Is this the purpose of a university education?

There can be no doubt that there is room for improvement at many South African universities. But before being hyper-critical, it is possibly necessary to analyse certain reasons for the status quo. Certain universities find it impossible to staff their departments. The reason for this is that the salaries paid by commerce and industry, and public practice are substantially higher than those offered by universities. It is generally known that at certain universities the departments are completely inadequately staffed. Inadequate staff can only mean that classes are too large, and this results in one-way communication instead of the desirable two-way communication found between students and lecturer in smaller classes. In the advanced classes it is imperative that there be two-way communication.

At universities, where the department is not understaffed, the position can occur where members of staff are allowed to supplement their income by doing consultancy work. Unfortunately a situation may develop where the consultancy work becomes more important than the academic work, with the result that the academic work suffers. However, it is acknowledged, that it is desirable for academics to maintain contact with the latest developments in their field and this can be achieved by doing consultancy work at an advanced level.

Certain members of the profession have stated that teaching accountancy at a university is a vocation, and it should, therefore, not be a problem to attract the necessary staff. It is submitted that teaching accountancy at a university, to a certain extent is a vocation, but the financial implications cannot be ignored. It is an absurd situation that junior partners, most probably below the age of 30 years, are earning substantially more than what professors and heads of departments are earning at universities.
The question that the profession as well as the universities must ask is: How effectively are the teaching resources being utilised in this country? An analysis of the statistics reveals a very alarming trend. It is generally known that the largest number of accountants qualify at the University of the Witwatersrand. In South Africa between 1971 and 1975, of the 1,672 chartered accountants who qualified, approximately 39% came from the University of the Witwatersrand. 10)

93.4% of the chartered accountants that have passed during the last five Final Qualifying Examinations of the Public Accountants' and Auditors' Board have attained their Certificate in the Theory of Accountancy certificates from seven universities. If the "special case" candidates are taken into account, with the larger universities, one finds that the remaining six universities have only produced 5% of the total number of chartered accountants qualifying during the last five years. In fairness it must be stated that a few universities have had candidates qualifying for their Certificates in the Theory of Accountancy only for one or two years. However, the number of Certificates in the Theory of Accountancy awarded by these universities is so low that it cannot really have affected the statistics, even if they had awarded Certificates in the Theory of Accountancy for the last five years.

A review of the statistics of one or two of the smaller universities reveals that these universities' statistics are excellent. The ability of the lecturers of these smaller universities to teach the relevant subjects is not questioned. The question is posed whether resources at these universities could not be utilised more effectively. Unfortunately, statistics have not been published of the number of final year candidates at these universities at the beginning of the year, and the number actually qualifying for the Certificate in the Theory of Accountancy. However, academics have often been heard to remark that if there is any doubt about a candidate

10) University of the Witwatersrand, Faculty of Commerce 1976 Year Book, p. 6, and the Public Accountants' and Auditors' Board Annual Reports for the years 1972 to 1975, and Final Qualifying Examination Statistics 1975.
being successful in the Final Qualifying Examination, he is not given the benefit of the doubt. Many academics have been accused of being egocentric and this possibly illustrates the point. It is more important to the academic that his department show good statistics the following year than the fact that a student, who by other standards would have qualified for a degree, is now going to add an additional year to his academic life at a university. It is submitted that the Final Qualifying Examination has had a detrimental effect on the teaching.

The Van Wyk De Vries Commission has stated that with mutual co-operation of universities better utilisation of scarce resources could be made.\textsuperscript{11} The smaller departments must find it difficult to teach all the relevant subjects. Time available for research must be absolutely minimal. It is realised that there are certain political implications in the broader and narrower sense. In the broader sense Government policy expects the ethnic universities, such as Durban Westville and the University College of the Western Cape, to cater for the needs of their own people. Blacks are allowed to do post-graduate studies at certain White universities. This should result in better utilisation of scarce manpower resources. In the narrower sense the prestige and image of the smaller universities are at stake. It could be argued that the universities are performing a service for the community in their area. Universities with very small departments could utilise their resources more effectively if the departments specialised in certain directions. These universities could endeavour to build up specialisations in specific areas such as taxation, estate planning, modern auditing techniques or auditing of computer installations. Alternatively, they could become feeder organisations for the larger universities, but on the condition that the standard of their graduate is acceptable. Furthermore the academics at these universities could assist the profession by doing empirical research which would be possible if they were not

\textsuperscript{11} Department of National Education, Main Report of the Commission of Enquiry into Universities, under the chairmanship of The Honourable Mr. Justice van Wyk deVries, Government Printer, Pretoria, 1974, p.287.
burdened with the additional subjects which have to be taught for the Certificate in the Theory of Accountancy. South African accountancy academics can be criticised for the lack of empirical research being done.

Another disturbing trend is that many students who are awarded a Certificate in the Theory of Accountancy struggle to qualify. Even at those universities where the great majority of students pass the Final Qualifying Examination, there are certain students who never qualify. These questions must be asked: Are the standards at certain universities too low? Were the universities too lenient in the application of their standards? This sometimes does happen when a university has transitional regulations, and is inclined, possibly, to give the benefit of the doubt to the candidate before changing to the new regulations. The 1976 Commerce Yearbook of the University of the Witwatersrand reveals that in 1971, 181 Certificates in the Theory of Accountancy were awarded at the university, and according to their statistics only 161 have passed.\footnote{University of Witwatersrand, Commerce Faculty, Handbook, 1976, p.6.} It means that the unsuccessful candidates had four attempts at passing the Final Qualifying Examination, subject to the assumption that they wrote every year. The question arises: Was the university too lenient?

It is recommended above that the number of contracting universities be reduced, and that the smaller universities be used more effectively for research and at the same time contribute to continuing education, that no doubt in future will be required on a greater scale. The universities concerned will be able to play a great role in contributing to continuing education and research.

No reference to the subventions paid by the Public Accountants' and Auditors' Board has been made in justifying a reduction in the number of contracting universities. It is submitted that the financial implications are of no consequence. Members of the profession may prefer a cost-benefit analysis in solving the problem, but it is not envisaged that the
subventions of the smaller universities should be eliminated, because it is imperative that chartered accountants teach at the universities. If the subventions do assist in drawing staff to universities, which is doubted, these subventions should be paid.

10.4 The Final Qualifying Examination of the Public Accountants' and Auditors' Board

In terms of section 25(1) of the Public Accountants' and Auditors' Act, No.51 of 1951, a qualifying examination is set by the Public Accountants' and Auditors' Board. The regulations applying to the Final Qualifying Examination are gazetted from time to time.13) The qualifying examinations of accounting institutes in most countries of the world seem to cause controversy, and it is therefore necessary to examine the Final Qualifying Examination of the Public Accountants' and Auditors' Board in some detail.

The Education Committee of the Public Accountants' and Auditors' Board consists of twelve members, three of whom are university academics. The Education Committee is responsible for defining the educational requirements of future chartered accountants at the point of entry. It is also responsible for compiling the Final Qualifying Examination. The examination paper is compiled by the chairman and vice-chairman of the Education Committee from a pool of questions compiled by the Question Composers Panel. The papers are submitted to members of the Education Committee, who are not university academics, for their comments. The Education Committee is also responsible for the appointment of the Question Composers Panel. The members of the Panel consist of practising accountants, chartered accountants in industry, and university academics.

Members of the Question Composers Panel are required to submit three questions, together with suggested solutions, annually.

The questions are scrutinised by the chairman or co-chairman of the Question Composers Panel and if the questions appear to be satisfactory, they are submitted to members of the Question Composers Panel, who are expected to provide the answers. Members providing these answers comment on the questions, whether there are any ambiguities, or inaccuracies and whether the questions are possibly too easy or too difficult. Marks to be allocated to the questions are also indicated as well as a suggested time for the completion of each question. On receipt of the suggested solutions submitted by the two members of the Question Composers Panel, the chairman will compare these answers with the original answers submitted. If there are major differences which cannot be reconciled, the questions will be rejected, or depending on the objections lodged, may be redrafted and again submitted to other members of the Question Composers Panel for their suggested solutions and comments. The revised questions are submitted to two members of the Question Composers Panel, one member being in public practice and the other an academic. This is to ensure that the questions can be judged from the practical as well as the theoretical aspects involved. It could happen that a question could be exposed to comments of eight different members of the Question Composers Panel. If no unanimity is achieved, then the question will be rejected.

The marking procedures of the Final Qualifying Examination do ensure fairness as every answer is marked twice and in some cases even three times. There are two examiners and a moderator (umpire) for every question. Every question is marked by two examiners and they mark a small batch of answers, so as to ascertain what problems may be encountered during the final marking. Any adjustments to suggested solutions are discussed with the moderator for the particular question. Once the problems with regard to the marking of an examination question have been ironed out, the marking commences, and from 1976 the marking will be independent, in the true sense of the word. The first marker will indicate his mark on a mark sheet and the second marker will indicate his mark on the inside cover. The moderator will compare the mark of the first marker with that of the second marker. A compromise mark may be allotted or alternatively a remark may be necessary.
The marks are collated by the administrative staff of the Public Accountants' and Auditors' Board and borderline cases are subjected to adjudication by the Education Committee of the Public Accountants' and Auditors' Board.

It has been mentioned above that qualifying examinations throughout the world do cause their fair share of controversy. The Final Qualifying Examination of the Public Accountants' and Auditors' Board has also caused a fair amount of controversy during the last few years. Besides allegations of leaks of information, the controversy extends to whether the examinations are fair. With regard to the former, the Public Accountants' and Auditors' Board appointed an advocate to enquire into the allegations of possible leaks of information. In the findings, it was found that there was no substance in the allegations whatsoever.

Much criticism has been levelled at the Final Qualifying Examination because of the fluctuating results from year to year. It has been asserted that large failure rates may be attributed to the fact that the contents of the papers are unbalanced, and that if a difficult question in one paper could be moved to another paper, this may result in many more candidates passing the examination. It has been observed that the high percentage of successful candidates may be attributed to the fact that accounting, or management accounting questions have been included in the auditing paper. It appears that when an auditing paper consists purely of auditing questions, the percentage of successful candidates drops quite dramatically.

With effect from 1976, a candidate is expected to have an aggregate of 300 marks out of a possible 600 marks, with an aggregate of at least 50% in the first two papers, namely Advanced Accounting paper I and Advanced Accounting paper II. The third paper, Auditing, requires a sub-minimum of 40%, and as long as the candidate attains an aggregate of 300 marks for the examination in its entirety, he passes the examination.
Prior to 1976 a candidate was expected to have an aggregate of 300 marks out of a possible 600 marks, with a sub-minimum of 40% in any one paper.

Statistics showing pass percentages for the years 1958 to 1975 appear in Table Number 3.

Table No.: 3.

Statistics for the Final Qualifying Examination of the Public Accountants' and Auditors' Board for the period 1958 to 1975

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage Passes for all Candidates</th>
<th>Percentage Passes of Candidates attempting the examination for the first time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1958</td>
<td>48,3</td>
<td>53,2</td>
</tr>
<tr>
<td>1959</td>
<td>36,5</td>
<td>56,6</td>
</tr>
<tr>
<td>1960</td>
<td>40,7</td>
<td>43,3</td>
</tr>
<tr>
<td>1961</td>
<td>42,7</td>
<td>48,7</td>
</tr>
<tr>
<td>1962</td>
<td>32,4</td>
<td>67,5</td>
</tr>
<tr>
<td>1963</td>
<td>59,2</td>
<td>54,4</td>
</tr>
<tr>
<td>1964</td>
<td>42,1</td>
<td>62,0</td>
</tr>
<tr>
<td>1965</td>
<td>50,6</td>
<td>55,0</td>
</tr>
<tr>
<td>1966</td>
<td>41,7</td>
<td>76,9</td>
</tr>
<tr>
<td>1967</td>
<td>61,2</td>
<td>66,4</td>
</tr>
<tr>
<td>1968</td>
<td>48,7</td>
<td>56,1</td>
</tr>
<tr>
<td>1969</td>
<td>51,7</td>
<td>53,4</td>
</tr>
<tr>
<td>1970</td>
<td>53,4</td>
<td>70,7</td>
</tr>
<tr>
<td>1971</td>
<td>68,8</td>
<td>80,5</td>
</tr>
<tr>
<td>1972</td>
<td>45,3</td>
<td>53,4</td>
</tr>
<tr>
<td>1973</td>
<td>67,9</td>
<td>77,2</td>
</tr>
<tr>
<td>1974</td>
<td>48,7</td>
<td>59,6</td>
</tr>
<tr>
<td>1975</td>
<td>51,8</td>
<td>57,0</td>
</tr>
</tbody>
</table>

Academics have expressed concern at the major fluctuations in the percentage of successful candidates during the last five years. An examination of the earlier years also reveals major fluctuations. The major fluctuations between the highest percentage of successful candidates and the lowest rates of successful candidates have caused some concern. A review of the abovementioned percentages indicates that the lowest percentage of successful candidates was in 1962, with
32.4% passing the examination. The highest percentage of successful candidates was in 1971 when 68.8% passed the Final Qualifying Examination.

How does one account for these major fluctuations? It has been stated that a factor to be borne in mind is that the participants of the examinations are from thirteen different universities and have been trained and educated according to the standards and norms of these universities. It must be acknowledged that the standards of tuition at the universities will differ because of different circumstances prevailing at each university. Another contributing factor to the fluctuation may be the tendency of universities to be more lenient during transitional times when there are changes in regulations and syllabi. It appears that "old timers" get the benefit of the doubt during this period.

Academics have expressed concern over the fact that brighter students sometimes fail the Final Qualifying Examination of the Public Accountants' and Auditors' Board, whereas some mediocre students pass the examination. The observation has been made that this may be because the standard of the questions set in the papers of the Final Qualifying Examination tend to vary too much. The argument of the academics may be countered by the fact that some of the mediocre students may have been exposed to more practical experience which has been of valuable assistance. On the other hand academics may argue that good theory should always be good practice.

Another reason advanced for the difference in the performance of candidates at universities and the Final Qualifying Examination, is that universities take year marks, which tend to favour the candidate, into account, whereas the Final Qualifying Examination only takes the performance in that particular examination into account in determining whether a candidate has passed or failed the examination.

Academics have also criticised the Public Accountants' and Auditors' Board for not publishing suggested solutions to the questions in the Final Qualifying Examinations. It appears
that the Education Committee of the Public Accountants' and Auditors' Board is reluctant to publish these answers. It is submitted that if candidates know the marking procedures and also know that alternative answers are accepted, and that the solution given is not necessarily the best one, but an acceptable one, there should be no reason for suggested solutions not being published. Some institutes overseas do publish suggested solutions, although they are regarded as being unofficial. The most notable example is that of the American Institute of Certified Public Accountants.

10.5 Influence of the Final Qualifying Examination on the Teaching of Accountancy at Universities

Another problem that arises is that the detailed syllabi of the Public Accountants' and Auditors' Board influences the teaching of accounting at universities. The Education Committee of the Public Accountants' and Auditors' Board stresses that these are the minimum requirements of the Board, and that if any universities wish to teach the subject in greater depth they are free to do so. A fear that arises from setting detailed syllabi is that the minimum "floor" levels prescribed often tend to become ceilings.

It may be appropriate to examine the findings of the Van Wyk De Vries Commission of Enquiry into Universities. The report states as follows:

"Although the Board has the statutory powers to prescribe to the universities, in practice there has proved to be a reasonable measure of flexibility in co-operation in laying down and modifying curricula. There appears to be a sound measure of consultation. However, the fact that the Board conducts its own examinations for admission to the profession means that the teacher at the university sometimes has to sacrifice his own academic approach because he is, after all, giving training for an external examination."14)

The question arises to what extent the detailed syllabi have influenced the teaching of accounting and related subjects at universities. Many universities teach various topics such as partnership accounts, in Accounting I and it is also taught in subsequent courses. Enquiries reveal that this is done so that the proficiency of the student may be kept at a high level in case he is required to answer a partnership question in the Final Qualifying Examination.

Certain universities place an undue emphasis on tutorials. Besides six accounting tutorials there are tutorials in other subjects, and this could result in a student, whether he be full-time or part-time, being required to complete anything from ten to fourteen tutorials per week, depending on the number of subjects he is taking. The answer to this question is quite simple, and that is that the student improves his speed and proficiency when he answers so many tutorials. A lecturer will give many tutorials to improve the proficiency of the student, and the more tutorials a student has been exposed to, the greater his chances are of getting a similar question in the Final Qualifying Examination. Thus the chances of the student doing well in an examination improve. Unfortunately as the proficiency of the lecturer is gauged by the success of his candidates in the Final Qualifying Examination of the Public Accountants' and Auditors' Board, it is only natural for the lecturer to place so much emphasis on tutorials.

The question that really should be answered is this: Is it really necessary for the student to be exposed to so many tutorials? It is submitted that a student could do half the number of tutorials and still understand the underlying principles. This will allow the student to do much more reading, which it is submitted has been neglected by many universities in this country. The part-time students have just not had the time to do the reading required of them.

There have been certain changes in the accountancy curricula of the universities as well as in the structure of departments, which it is believed have been influenced by the effects of
the Final Qualifying Examination. In some instances, it is submitted the changes have resulted in a course of narrower content compared with the original courses and thus a retrogressive step. The Final Qualifying Examination's results of universities may improve as a result of such changes, but there are doubts whether the accountants have a broader education. Another question which arises is: Why does the accounting course take four or five years at most universities, whereas in many overseas universities two or three years are needed to complete the course? The influence of the Final Qualifying Examination of the Public Accountants' and Auditors' Board is no doubt a contributing factor to the situation.

A sad indictment may be directed at universities. This is that certain private tutors are providing tuition for students at certain universities and for candidates of the Final Qualifying Examination. A question that arises is why this tuition is necessary. Is there such a great difference between the standard at certain universities and the standard of the Final Qualifying Examination? The fact that these private tutors are apparently financially successful indicates that there must be a need for such tuition and this leads to the conclusion that the tuition at certain universities leaves much to be desired. It also possibly indicates that students are spoonfed at universities and are not taught to teach and motivate themselves.

A Standing Committee was formed during 1972 to review the educational requirements of the profession continuously. The terms of reference of this Standing Committee are:

1. To review and update the content of the Board's minimum C.T.A. syllabi on a continuing basis.

2. To satisfy itself that the syllabi of all participating universities and the Board's education scheme comply with the minimum requirements of the Board.

3. To approve immediately the syllabi complying with the Board's minimum requirements.

4. To draw up a schedule of courses mounted, or to be mounted, by participating universities and the Board's
education scheme. 15)

An academic is at liberty to recommend to the Standing Committee alterations to this syllabus content. This committee officially still exists, but is not very active at present.

10.6 Analysis of Overall Statistics of the Final Qualifying Examination of the Public Accountants' and Auditors' Board

Various statistics are detailed in Table Number 4., individually for the years 1973 to 1975. The cumulative percentage for the years 1957 to 1975 are also given. A few deductions can be made without fear of contradiction. It is obvious from these statistics that candidates employed in the profession have a much better chance of successfully completing the examination than those not employed in the profession. The overall percentage for the years 1957 to 1975 indicates that 55.1% of candidates who wrote the examination whilst employed in the profession were successful and only 31.2% of those employed outside the profession were successful during the same period.

15) Public Accountants' and Auditors' Board, Minutes of a Conference between members of the Board's Education Committee and Teaching Staff of the universities, held at the Oklahoman Motel, Pretoria, on Thursday and Friday, 12 and 13 April 1973, p.10

16) The Public Accountants' and Auditors' Board made their detailed statistics available to me for the purposes of this study. Their assistance in this regard, particularly Mr. M.L. Myburgh, is acknowledged with thanks.
Table No.: 4.

Certain Statistics of the Final Qualifying Examination of the Public Accountants' and Auditors' Board for the years 1973 to 1975 individually and cumulatively for the years 1957 to 1975.

(Percentages indicate successful candidates. Failures will be the difference between 100% and the percentage stated).

<table>
<thead>
<tr>
<th></th>
<th>1973</th>
<th>1974</th>
<th>1975</th>
<th>Years 1957 to 1975</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Candidates who wrote the whole examination</td>
<td>67.9%</td>
<td>48.7%</td>
<td>51.8%</td>
<td>48.8%</td>
</tr>
<tr>
<td>B. Candidates employed in the profession</td>
<td>72.2%</td>
<td>53.8%</td>
<td>55.0%</td>
<td>55.1%</td>
</tr>
<tr>
<td>C. Candidates not employed in the profession</td>
<td>54.5%</td>
<td>26.5%</td>
<td>38.8%</td>
<td>31.2%</td>
</tr>
</tbody>
</table>

Analysis of periods of Absence from Profession, of Candidates in C above

Periods for which candidates have been employed outside the profession:

<table>
<thead>
<tr>
<th>Period</th>
<th>1973</th>
<th>1974</th>
<th>1975</th>
<th>Years 1957 to 1975</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than one year</td>
<td>72.9%</td>
<td>42.8%</td>
<td>58.0%</td>
<td>45.2%</td>
</tr>
<tr>
<td>One to two years</td>
<td>58.8%</td>
<td>30.0%</td>
<td>33.3%</td>
<td>35.3%</td>
</tr>
<tr>
<td>Two to three years</td>
<td>50.0%</td>
<td>6.6%</td>
<td>52.0%</td>
<td>32.2%</td>
</tr>
<tr>
<td>Three to four years</td>
<td>38.1%</td>
<td>-</td>
<td>37.5%</td>
<td>24.8%</td>
</tr>
<tr>
<td>Four to five years</td>
<td>44.4%</td>
<td>12.5%</td>
<td>-</td>
<td>21.8%</td>
</tr>
<tr>
<td>More than five years</td>
<td>33.3%</td>
<td>22.7%</td>
<td>9.0%</td>
<td>19.3%</td>
</tr>
</tbody>
</table>

Another fact that emerges, which can also be stated without fear of contradiction, is that the longer a candidate is employed outside the profession, the more difficult it is for him to pass. Candidates who have been out of the profession for less than one year, have a 45.2% chance of passing, whereas those employed outside the profession for more than five years have only 19.3% chance of passing the examination.
The analysis in table number 5., according to the period of articles served by the candidates, indicates that graduates have a much better chance of passing the examination than non-graduates. The statistics for the overall period 1957 to 1975 reveal that 52,4% of graduates were successful compared to 48,1% of the five-year articled clerks. An aggregate of the three years ending in 1975 shows that 60,8% of the trainee accountants, serving three years articles, were successful compared to 52,9% of those serving five years' articles. This trend is indeed welcomed and should be an incentive to future trainee accountants, who have the finance to attend universities full-time, as it does appear that their chances of being successful are greater than the chances of trainee accountants who serve five years' articles.

Table No.: 5.
Analysis of Candidates according to Period of Articles

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5 years' articles</td>
<td>66,0%</td>
<td>38,8%</td>
<td>50,9%</td>
<td>52,9%</td>
<td>48,1%</td>
</tr>
<tr>
<td>3 years' articles</td>
<td>70,3%</td>
<td>61,1%</td>
<td>53,9%</td>
<td>60,8%</td>
<td>52,4%</td>
</tr>
</tbody>
</table>

The Public Accountants' and Auditors' Board has granted a concession to Honours graduates of certain universities. These students, who have studied four years full-time to attain the B.Com.(Honours) qualification, have been allowed to write the Board Qualifying Examination during the first year of their articles. This concession has been granted on an experimental basis and the situation will be reviewed in 1978. In 1974, 74,4% were successful and in 1975, 42,2%, giving an overall percentage of 50%, but two years is not long enough for a fair assessment. It has been stated that, as the Final Qualifying Examination is basically a re-test of what has been taught at universities, students do not need that much practical experience, if any, to complete the examination successfully. It has been stated that good theory should be good practice and thus practical experience is not imperative for the successful completion of the Board Final Qualifying Examination. It must be remembered that the students who are admitted to these courses are supposed to be the best. If the content of the Final Qualifying
Examination becomes more practice oriented, it will be interesting to observe the performance of these candidates during the next three years.

Statistics according to the expiry of articles applicable to all candidates in Table Number 6. again show that the longer a candidate is out of articles, the more difficult it is for him to be successful in the examination. The statistics for the period 1957 to 1975 show that those clerks who had twelve months articles left had a 71,5% chance of passing, whereas those candidates whose articles had expired less than twelve months before the examination had a 67,3% chance of passing. The cumulative statistics for the three years 1973 to 1975 indicate a reversal in the trend: namely, that students, whose articles had expired twelve months or less prior to the examination, had a 71,8% chance of passing and those who had twelve months articles to run had a 67,4% chance of passing. Candidates whose articles had expired more than five years previously had a 22,7% chance of passing if statistics for the nineteen years are taken into account. This can be compared with 27,9% for the last three years. It is only natural that the longer a person has been out of articles, the more difficult it will be for him to succeed in the examination.

Table No.: 6.

Analysis of Candidates according to Expiry of Articles

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3 years to run</td>
<td>-</td>
<td>71,4%</td>
<td>41,2%</td>
<td>50,0%</td>
<td>50,0%</td>
</tr>
<tr>
<td>18 months to run</td>
<td>76,9%</td>
<td>54,8%</td>
<td>39,4%</td>
<td>55,6%</td>
<td>60,2%</td>
</tr>
<tr>
<td>12 months to run</td>
<td>76,5%</td>
<td>64,6%</td>
<td>64,3%</td>
<td>67,4%</td>
<td>71,5%</td>
</tr>
<tr>
<td>Expiry less than 12 months ago</td>
<td>83,4%</td>
<td>69,6%</td>
<td>64,9%</td>
<td>71,8%</td>
<td>67,3%</td>
</tr>
<tr>
<td>Expiry less than 2 years ago</td>
<td>80,6%</td>
<td>51,2%</td>
<td>59,4%</td>
<td>63,5%</td>
<td>55,9%</td>
</tr>
<tr>
<td>Expiry less than 3 years ago</td>
<td>69,8%</td>
<td>45,5%</td>
<td>63,9%</td>
<td>62,8%</td>
<td>50,4%</td>
</tr>
<tr>
<td>Expiry less than 4 years ago</td>
<td>63,5%</td>
<td>32,4%</td>
<td>46,2%</td>
<td>47,7%</td>
<td>40,0%</td>
</tr>
<tr>
<td>Expiry less than 5 years ago</td>
<td>54,5%</td>
<td>34,2%</td>
<td>45,5%</td>
<td>44,5%</td>
<td>36,4%</td>
</tr>
<tr>
<td>Expiry more than 5 years ago</td>
<td>39,5%</td>
<td>16,5%</td>
<td>25,7%</td>
<td>27,9%</td>
<td>22,7%</td>
</tr>
</tbody>
</table>
In the past, concern has always been expressed about chartered accountants in the country areas. It is acknowledged that these chartered accountants do render an invaluable service to their communities. It is suggested that policy makers in the profession in their endeavours to accommodate the chartered accountant in the country areas in the formulation of their policy, are mis-placing their priorities. This is because statistics for the period 1957 to 1975 indicate that successful candidates who served articles in the country areas only contributed approximately 3,2% of all the successful candidates for the same period. In real terms this is less than 10 chartered accountants annually. Statistics detailed in Table Number 7. indicate that articulated clerks in a university centre have the best chance of passing, whereas their colleagues in large centres without universities, and in country towns have difficulty in passing. As the statistics show, however, the results of the latter two groups have improved immensely during the last three years. A question that arises is what has caused this improvement. It may be questioned whether the tuition offered by certain private organisations has not contributed to this improvement. If this is the case, the private tuition offered should be encouraged. Another less likely contributory factor, could be that in certain areas partners may show greater interest in the welfare of their clerks.

Table No. 7.
Analysis of Candidates according to where Articles Mainly Served

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>University Town</td>
<td>69,5%</td>
<td>49,3%</td>
<td>52,3%</td>
<td>56,7%</td>
<td>50,1%</td>
</tr>
<tr>
<td>Large Centre</td>
<td>50,0%</td>
<td>38,7%</td>
<td>47,6%</td>
<td>45,3%</td>
<td>41,8%</td>
</tr>
<tr>
<td>Country Town</td>
<td>51,4%</td>
<td>46,7%</td>
<td>42,1%</td>
<td>47,8%</td>
<td>30,3%</td>
</tr>
</tbody>
</table>

10.7 Review of Statistics of Individual Universities

An argument always mooted for the retention of a Uniform Final Qualifying Examination of the Public Accountants' and Auditors' Board, is the difference in the various standards of the
universities. This argument requires investigation to determine its validity. In Annexure F. the results for the years 1973 to 1975 have been ranked according to performance by universities in each paper, as well as the aggregate performance. A ranking of successful first-timer candidates is also given. (This is the successful first-timer candidates over total number of first-time candidates expressed as a percentage). There has been a tendency among academics to judge the performance of universities utilising this criterion. It is submitted that this approach is fallacious as the standard of teaching at a university should be measured by the performance of all first-timers. Also a small university may have 100% success having ten candidates only, whereas a large university may have 80% success with possibly over 100 candidates. It is therefore important to keep everything in its true perspective. Comparisons of percentages may be misleading and in certain circumstances one should look at the performance in real terms.

To ensure anonymity of universities a random code has been allocated, but it is important also to give an indication of the size of the university concerned. The basis of the first division is those six universities which have produced the most chartered accountants during the last three years. Category 2 represents the remaining universities. One university has been ommitted because it had one candidate only during the three years that are being used for the comparison. In the case of the University of Natal, for the 1975 year, the statistics of the Pietermaritzburg department have been incorporated with the Durban department to facilitate comparison, as the Pietermaritzburg statistics are not available for earlier years.

To what extent do the standards really differ? If the difference between the highest mark and the lowest mark is expressed as a percentage of the lower mark then it is found that the differences are quite substantial. The overall differences for papers I, II and III of the 1975 examination were respectively 34,7%, 27,0% and 32,0%. The difference for the aggregate was 22,8%. The 1973 percentages reveal an even
greater disparity and the differences in papers I, II and III are 47.0%, 43.9% and 38.4% respectively. If the differences between the different sizes are compared one still finds a substantial variance. If the category 1 universities are compared, one finds in the first paper for 1975 that the difference between high and low expressed as a percentage of the lowest mark in the first paper was 18.32%; in the second paper it was 10.54% and in auditing it was 12.26%. The difference on aggregate was 9.8%. The difference of the category 2 universities is the same as for all universities as the highest marks and the lowest marks for all three papers came from this category. This also illustrates that universities concentrate on certain areas at the expense of other areas. In one instance the auditing achievements are the highest, which illustrates a poor standard in the other areas.

Standards at individual universities also tend to vary from year to year. Academics have been heard to remark that the standards in a particular year have been more lenient because of certain transitional regulations. Another reason advanced for different standards is the possibility of members of staff being on sabbatical leave. Annexure F reveals that university H has the following rankings in paper III for the years 1973, 1974 and 1975 respectively, namely 5, 2 and 2. Rankings in auditings for university G for the same years reveals a greater disparity namely 2, 8 and 6. University D had a ranking in the third paper of 10 in 1973, 3 in 1974 and 9 in 1975. University D's ranking for the first paper shows 1973 with 10, 1974 with 9 and 1975 with 5. University E in paper III reveals a ranking of 4 in 1973, 6 in 1974 and 11 in 1975. How does one account for such a change? Was there possibly a change of lecturer in that particular subject?

It has been stated that comparisons of the success attained by first-timers as a means to determine a university's proficiency is fallacious. University A based on this criterion is ranked 8 in 1975 with an aggregate revealing that it ranked number 4. This must lead to the conclusion that the university was unfortunate and had many borderline
cases. University M, a small university with a ranking, according to the successful first-timers, of 7 has an aggregate ranking of 1. This is misleading as university M is in category size number 2 and the number of candidates is relatively small. University K is ranked 3 for 1975 on successful first-timers with an aggregate ranking of 9. This again is a category 2 university and the number of candidates involved is small with the weaker candidates materially affecting the average. From this it can be deduced that the criterion of successful first-time candidates is a fallacious one. A review of the rankings in the years 1973 and 1974 also reveals a similar manifestation.

To overcome the problems of annual fluctuations, and of staff being on leave, the marks for the various papers were aggregated for the years 1973, 1974 and 1975 as well as the aggregate marks for the three years. The aggregate marks for the three years are also ranked, in Annexure F. reveals that three category 2 universities are in the top four based on aggregate. No doubt the recommendation made that the number of universities contracting with the Public Accountants' and Auditors' Board should be drastically reduced will be questioned if university K is ranked third and university M is ranked fourth. These two universities would possibly not cater for final year students. University K had one exceptionally good year and the total number of first-timers for the two universities during the three years was only 25. Viewed realistically the contribution made by these two universities is very small. It would be interesting to see how many students enrolled for the final year at these universities, and how many were awarded the Certificate in the Theory of Accountancy. The university with the highest ranking has produced fewer than 50 chartered accountants during the last three years. It must be reiterated that the whole question of statistics must be seen in its true perspective.

It can be stated categorically that there is substance in the argument that the standards among the various universities differ substantially. It is therefore imperative that a

17) For recommendations with regard to contracting universities see pp. 403/404.
uniform final examination be held to ensure uniformity of standards under existing circumstances.

A review of the statistics of first-timers for the last three years as reflected in Table Number 8., shows that the percentages in the first two papers have been reasonably consistent and the third paper has varied. In 1973 the first-timers attained a mark of 54,2%, in 1974, 43,3% and in 1975, 45,0%. The high average for 1973 can be attributed to the fact that there was a costing question as well as an accounting question in the auditing paper. It is interesting to observe that in 1973 and 1974 the performance of first-timers was better than that of previous candidates. In the 1975 examination the performance of other candidates was marginally better on aggregate than first-timers.

Table No.:
National Averages of all Candidates, those writing the Examination for the first time and subsequently

<table>
<thead>
<tr>
<th></th>
<th>Paper 1</th>
<th>Paper 2</th>
<th>Paper 3</th>
<th>Aggregate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973 - First</td>
<td>56,4</td>
<td>54,9</td>
<td>54,2</td>
<td>55,2</td>
</tr>
<tr>
<td>All</td>
<td>55,3</td>
<td>53,2</td>
<td>53,1</td>
<td>53,9</td>
</tr>
<tr>
<td>Other</td>
<td>53,9</td>
<td>51,2</td>
<td>51,7</td>
<td>52,3</td>
</tr>
<tr>
<td>1974 - First</td>
<td>55,6</td>
<td>55,5</td>
<td>43,3</td>
<td>51,5</td>
</tr>
<tr>
<td>All</td>
<td>53,9</td>
<td>53,6</td>
<td>42,6</td>
<td>50,0</td>
</tr>
<tr>
<td>Other</td>
<td>49,9</td>
<td>49,3</td>
<td>41,0</td>
<td>46,7</td>
</tr>
<tr>
<td>1975 - First</td>
<td>54,1</td>
<td>54,3</td>
<td>45,0</td>
<td>51,1</td>
</tr>
<tr>
<td>All</td>
<td>56,4</td>
<td>51,8</td>
<td>45,3</td>
<td>51,2</td>
</tr>
<tr>
<td>Other</td>
<td>60,3</td>
<td>47,6</td>
<td>46,0</td>
<td>51,3</td>
</tr>
</tbody>
</table>

It is suggested that the statistics of the Public Accountants' and Auditors' Board be expanded to show the averages of first-timers, the national average and the average of other candidates. It is further recommended that the Public Accountants' and Auditors' Board investigate the possibility of computerising the compilation of the mark sheets so that various statistical analyses can be made to determine the fairness of questions, as well as differences in standards between questions and papers. These tabulations
could be of substantial assistance to the Education Committee in the adjudication process.

10.8.1 Alternatives to the Present Final Qualifying Examination

A trite observation is that the Final Qualifying Examination of the Public Accountants' and Auditors' Board has caused a fair amount of controversy. Many academics have proposed that the Final Qualifying Examination be replaced by examinations set at universities. This proposal is made subject to the proviso that members of the Education Committee of the Public Accountants' and Auditors' Board will be moderators and external examiners at contracting universities. Opponents of this suggestion state that as standards at universities are so diverse, at this particular point in time, this suggestion is unacceptable. It is further asserted that inadequate control of examination papers would result in a complete lack of necessary uniformity of standards at the various universities. An alternative suggestion has been made that a uniform final-year Certificate in the Theory of Accountancy examination set by academics be adopted by all universities as the final examination. The suggestion is again subject to the proviso that moderators and external examiners be appointed by the Public Accountants' and Auditors' Board. It has been suggested that this uniform final-year examination be followed by a professional examination on auditing and general professional knowledge, for those who wish to register as practising accountants with the Public Accountants' and Auditors' Board. A reason for suggesting a uniform final examination set by academics, is that uniformity of standards will still be maintained and that, as the present Final Qualifying Examination has tended to re-examine questions already examined on by universities in their final Certificate in the Theory of Accountancy examinations, this will eliminate unnecessary duplication. If a uniform final examination was to be accepted by the universities, the Board could change the nature of its practitioner's examination to cover practical aspects of auditing as well as general professional knowledge.
 Needless to say, most academics favour the universities setting a final examination individually, whereas generally, practitioners favour a uniform final examination set by academics and used by all universities. Academics counter the latter suggestion by stating that it interferes with the traditional autonomy and freedom of a university to teach what it likes and how it likes. Another argument against the uniform qualifying examination is that diversity of approach to accountancy education should be welcomed.

The Final Qualifying Examination of the Public Accountants' and Auditors' Board has resulted in the following comments being attributed to L. Kritzinger:

"I may say that the need for a Board examination after the student has successfully pursued his university studies is heartily contested in some university quarters, they consider it something of an insult that the Board does not accept the level of the universities' degrees as sufficient for automatic acceptance into the ranks of the profession, always assuming of course, that the man has also had the requisite professional experience and articles. From the Board's standpoint, of course, one can see their wishes to have a uniform standard of member in that one university's degree may not be of the same standard as another's – how would the Board be able to monitor any changes? The advent of the Society (South African Society of University Teachers of Accounting) may well be the first step towards the development of a common and universally acceptable minimum standard amongst all the teaching bodies, in which case the Board might be persuaded in due course to drop its own examination and accept the examination results awarded by the universities, one can't tell." 18)

It has been contended that a uniform examination set by academics is preferable to the status quo because the examiners will be the teachers and not practitioners, who have no experience of teaching. Another viewpoint has been expressed by Douglas Garbutt, who states:

"... It is one of the fundamental functions of a professional body to determine the qualifications which potential entrants to membership require and to test their professional competence.

before admission. If C.T.A. and F.Q.E. are essentially identical it is probably better for the university to drop the C.T.A. than for the profession to drop its F.Q.E." 19)

Another argument against the introduction of a uniform final examination is that certain universities award an honours degree in lieu of a Certificate in the Theory of Accountancy. The authorities at these universities will not accept the examinations of an external body as a qualification for a university degree. The anomalous situation could arise that candidates will still be required to write two different examinations: a uniform examination as well as an examination set by the universities.

10.8.2 Analysis of Responses to Questions Relating to the Final Qualifying Examination 20)

Two questions were included in the questionnaire to test the views of chartered accountants in South Africa with regard to the Final Qualifying Examination. One question tested the opinion on the possibility of approved universities individually examining prospective entrants to the profession without a subsequent examination. Certain alternatives were given to this. Another question was whether the Final Qualifying Examination should be replaced by a uniform final examination, which would be set by university teachers of accounting. The responses to questions 10 and 11 are shown in Table Numbers 9 and 10 respectively.

20) For detailed statistics, see Annexures B.8 and B.9
Table No.: 9.
Analysis of Responses to Question 10

Indicate which of the statements made below is most acceptable to you:

a) Approved universities should have the power to examine prospective entrants to the profession without the Public Accountants' and Auditors' Board setting a subsequent final examination. 12,5%

b) Approved universities should have the power to examine prospective entrants to the profession, but the Public Accountants' and Auditors' Board should set an examination for those desiring practising certificates 17,8

c) The Public Accountants' and Auditors' Board should set an examination for all prospective Chartered Accountants 67,9

d) Other

No Response 0,9

100,0% 21)

The responses in Table Number 9. indicate that respondents overwhelmingly support the Final Qualifying Examination set by the Public Accountants' and Auditors' Board for all prospective chartered accountants. Protagonists of the status quo accounted for 67,9% of the responses, with only 12,5% being in favour of a university examination. 17,8% were in favour of a university examination together with an examination set by the Public Accountants' and Auditors' Board for those desiring practising certificates. Other suggestions accounted for 0,9% and no opinions also accounted for 0,9%.

An examination of the views according to occupation classification indicates a close correlation between the views of those in public practice and those not in public practice. University teachers of accounting seem to favour the alternative, that chartered accountants desiring a practising certificate should write an examination set by the Board. An analysis of the responses based on age classification reveals a very similar trend without any great variances. The same
applies to an analysis based on whether chartered accountants have a degree or not.

The views of the special group interviewed indicate that 59,2% favour the retention of the status quo, 22,5% favour an examination set by universities with no subsequent examination and 14,3% favour a university examination together with an examination set by the Board for those accountants desiring to be in public practice. An analysis of the above statistics proves that the profession as such does not favour the final qualifying examination being delegated to the universities.

Table No.: 10.
Analysis of Responses to Question 11

<table>
<thead>
<tr>
<th>Analysis of Total Responses</th>
<th>Percental Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the event of universities agreeing to set a uniform final examination in lieu of the Certificate in the Theory of Accountancy, indicate which statement is most acceptable to you:</td>
<td></td>
</tr>
<tr>
<td>a) That no further examination whatsoever be set by the Public Accountants’ and Auditors’ Board and the designation C.A. (S.A.) may be used upon registration with one of the provincial societies.</td>
<td>18,5%</td>
</tr>
<tr>
<td>b) That the Public Accountants’ and Auditors’ Board should set an examination for those desiring practising certificates, and this examination be written during the last year of the practical experience period and the C.A. (S.A.) designation may be used upon registration with one of the provincial societies.</td>
<td>17,8</td>
</tr>
<tr>
<td>a) That the Public Accountants’ and Auditors’ Board should set an examination for all prospective Chartered Accountants.</td>
<td>61,7</td>
</tr>
<tr>
<td>d) Other</td>
<td>0,4</td>
</tr>
<tr>
<td>No Response</td>
<td>1,6</td>
</tr>
<tr>
<td></td>
<td>100,0%</td>
</tr>
</tbody>
</table>

22) For detailed statistics see Annexure B.9
Table Number 10. reveals that respondents again prefer the retention of the *status quo* is preferred by 61,7% of the respondents, with 18,5% of the respondents favouring a uniform final examination with no subsequent examination set by the Public Accountants' and Auditors' Board. Only 17,8% of the respondents favoured a uniform final examination followed by a practising examination set by the Public Accountants' and Auditors' Board.

An analysis of the views of university teachers of accounting reveals a preference for a uniform examination set by university lecturers together with a subsequent practising certificate examination set by the Public Accountants' and Auditors' Board. This proposal is favoured by 45% of the academics, whereas 25% prefer the *status quo*. 21,7% of academics favour a uniform final examination with no subsequent examination set by the Board.

The views of the special group interviewed indicate 42,9% prefer a uniform final examination. The retention of the *status quo* is favoured by 40,8% of the respondents with 8,2% favouring a uniform final examination together with a subsequent practising certificate examination set by the Board. Other suggestions and no opinions account for 8,1% of the responses. The interviewed group may have been influenced by being told that a uniform final examination would be subject to moderation and external examination by members of the Education Committee of the Public Accountants' and Auditors' Board.

A few suggestions were made for the Final Qualifying Examination by the respondents. One respondent obviously influenced by Solomons' "Prospectus for a Profession", suggested an open-book examination to be set by the Public Accountants' and Auditors' Board as a test of professional competence. Another respondent put forward that candidates be allowed only three attempts to complete the Final Qualifying Examination. The Final Qualifying Examination of

the English Institute was also preferred by a few respondents. The professional examination set by the Institute of Chartered Accountants in England and Wales, consists of two parts. Certain respondents also favoured the introduction of oral examinations.

It appears from the abovementioned analysis that the majority wish to retain the Final Qualifying Examination set by the Public Accountants' and Auditors' Board. The principle of the profession determining who shall be the entrants to the profession is accepted beyond any doubt, but the format of the examination may require alteration.
CHAPTER 11

THE ATTITUDE OF RESPONDENTS TO CERTAIN CONTROVERSIAL ISSUES IN THE PROFESSION AND ACCOUNTANCY EDUCATION

11.1  Introduction

The views of the profession regarding many controversial issues were tested, utilising a questionnaire distributed to all chartered accountants in South Africa. The response to the questionnaire was satisfactory, seen in the light of the controversy the questionnaire caused. Certain provinces initially refused to distribute the questionnaire, but it was ultimately distributed under a different covering letter.

It is averred that the responses are representative of the views of the profession. The breakdown of the respondents, according to occupation classification, is shown in Figure 1. From this it will be observed that the distribution of the respondents, according to occupation classification, corresponds closely to the estimated distribution according to occupation classification for all chartered accountants in South Africa.

Figure 1.
Analysis of Respondents according to Occupation Classification

<table>
<thead>
<tr>
<th>Occupation Classification</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.A.'s in Public Practice</td>
<td>47.7%</td>
</tr>
<tr>
<td>C.A.'s in Commerce</td>
<td>47.4%</td>
</tr>
<tr>
<td>C.A.'s in Industry Consultancy, Finance</td>
<td>2.4%</td>
</tr>
<tr>
<td>Retired</td>
<td>2.4%</td>
</tr>
<tr>
<td>Academics</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

1) For questionnaire and covering letter, see Annexure A.
2) The response was approximately 37.8% - certain provincial societies could not give accurate figures of questionnaires distributed. The 37.8% response includes those rejected questionnaires as well as those that arrived too late for processing.
3) For a breakdown of a detailed occupation classification according to age, see Annexure B.1.
4) For a breakdown of respondents according to occupation classification see Annexure B.1.
In figure 2 a further breakdown of respondents within the above occupation classification is given. Chartered accountants in public practice are classified into four groups, namely principals - for less than five years, five to ten years, more than ten years and employees. Their colleagues not in public practice, are classified into four groups, namely, commerce and industry, consultancy, finance and other.  

Figure 2.

Analysis of Chartered Accountants in Public Practice

Analysis of Chartered Accountants not in Public Practice

The geographical distribution of respondents, as well as all chartered accountants in Southern Africa is shown in figure 3. This indicates that there may be a slight bias because of more responses from chartered accountants in Natal and Transvaal.

5) For further details of respondents in commerce, industry et al. see Annexures B.1, B.5 and B.6.

6) Information furnished by the Administrative Manager of The National Council of Chartered Accountants (S.A.), Mr. N. Neate.
Figure 3.

Geographical Distribution of Chartered Accountants in Southern Africa

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cape Province</td>
<td>24.1%</td>
</tr>
<tr>
<td>Natal</td>
<td>14.7%</td>
</tr>
<tr>
<td>Transvaal</td>
<td>55.9%</td>
</tr>
<tr>
<td>Other</td>
<td>3.3%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Analysis of Respondents According to Region where Employed

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cape Province</td>
<td>21.3%</td>
</tr>
<tr>
<td>Natal</td>
<td>16.4%</td>
</tr>
<tr>
<td>Transvaal</td>
<td>58.8%</td>
</tr>
<tr>
<td>Other and &quot;no responses&quot;</td>
<td>3.1%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

The breakdown of respondents, according to age and year when C.A. qualification was attained, is shown in figures 4 and 5 respectively.

Figure 4.

Analysis of Respondents According to Age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 31 years</td>
<td>22.1%</td>
</tr>
<tr>
<td>31 - 40 years</td>
<td>37.7%</td>
</tr>
<tr>
<td>41 - 55 years</td>
<td>28.6%</td>
</tr>
<tr>
<td>Above 55 years</td>
<td>11.6%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>
Figure 5.
Analysis of Respondents according to year when
C.A. Qualification attained

21.8%  19.6%  36.6%
Before 1952 1952 to 1960 1961 to 1970
21.9%  Not Indicated
After 1970 0.1%

The academic qualifications of respondents are detailed in Annexure B. 7) Slightly more than 30% have degrees and of these 70% have Bachelor of Commerce degrees. It is interesting to note that more than half of these respondents attained their degree full-time. Particulars relating to post-qualification specialisation are shown in Annexure B. 8) From the responses to the questionnaire, it appears that only 15.1% (of 2367 respondents) regard themselves as specialists, with the major field of specialisation being management accounting. These qualifications were mostly attained by correspondence, part-time or through personal initiative.

The breakdown of the earnings of the respondents is shown in figure 6. 9)

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7) For further details see Annexure B.3.
8) For further particulars see Annexure B.4.
9) For a breakdown of incomes according to occupation, age and academic qualifications, see Annexure B.5.
11.2 Practical-Experience Requirements, Articles and Graduate Entry

With regard to the practical-experience requirements and graduate entry, four questions were posed in the questionnaire. Question 7 was basically designed to see whether practical experience should be in the office of a chartered accountant only, or whether certain options should be allowed. Question 8 was designed to check desirability of articles, a service contract and free transferability. Question 9 assessed whether graduate entry was desirable and question 37 tested the opinions of chartered accountants not in public practice, as to whether their experience during articles was of assistance to them in their present careers.
Table No.:11.
Analysis of Responses to Question 7

Indicate which of the statements made below is most acceptable to you:

<table>
<thead>
<tr>
<th></th>
<th>Analysis of Responses</th>
<th>Percental</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>All prospective Chartered Accountants must undergo some period of supervised practical experience (articles) in a practitioner's office prior to qualification.</td>
<td>61,7%</td>
</tr>
<tr>
<td>b)</td>
<td>Prospective Chartered Accountants wishing to enter public practice must undergo some period of supervised practical experience (articles) prior to qualification.</td>
<td>4,6</td>
</tr>
<tr>
<td>c)</td>
<td>Practical experience is not required of the prospective Chartered Accountant.</td>
<td>0,3</td>
</tr>
<tr>
<td>d)</td>
<td>Prospective Chartered Accountants should, prior to qualification, either undergo a period of supervised practical experience in a practitioner's office or combine experience in a practitioner's office with a period in commerce and industry.</td>
<td>32,6</td>
</tr>
<tr>
<td>e)</td>
<td>Other</td>
<td>0,1</td>
</tr>
<tr>
<td>No opinion</td>
<td></td>
<td>0,7</td>
</tr>
</tbody>
</table>

From the analysis in Table Number 11. it is apparent that the retention of the present system of practical experience is preferred. An analysis of responses according to occupation classification reveals that 72,2% of chartered accountants in public practice favour the status quo, whereas 51,7% only of their colleagues not in public practice favour it.

The 1968 COBOK Survey had a question reading:

"Do you consider that some period of service under articles of clerkship or other supervised training is an essential part of training of a chartered accountant?" 11)

10) For detailed statistics see Annexure B.7.
The responses were: Yes - 98.7\%
No - 1.3\%

In the 1975 survey, we find that "no opinions" and protagonists for no practical experience whatsoever, account for 1\%, with 99\% in favour of some form of practical experience. There has definitely not been any change in the views of the profession.

The importance of the practical-experience period is further underlined by the responses to a question posed to chartered accountants not in public practice, (excluding university teachers of accounting and retired accountants), as table number 12. indicates.

Table No.:12.
Percental Analysis of Responses to Question 37

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>No Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>92.6</td>
<td>4.5</td>
<td>2.9</td>
</tr>
</tbody>
</table>

From the responses in Table Number 12. it is patently clear that chartered accountants not in practice believe that the practical experience has been of assistance in their present careers. The detailed analysis according to occupation classification reveals that all groups expressed a positive opinion with responses of 83.3\% and 70.8\% from the occupation classifications, consultancy and others. The responses of these two classifications accounted for only 72 out of 1 125 replies. It is suggested that with such substantial affirmative indications the importance of the practical-experience requirement is underlined. Chartered accountants not in public practice stated that the exposure to so many systems whilst in the employment of a chartered accountant has proved to be of inestimable worth to them in their present careers. Chartered accountants interviewed indicated that although exposure to the systems of a firm

12) For detailed statistics see Annexure B.21.
in commerce would be good, this would be difficult to control, and there were reservations as to whether the trainee accountant in a period of six months to a year could be exposed to any worthwhile experience in a commercial or industrial firm.

The 1968 survey included a question,

"Should any part of the clerk's practical training under articles or other supervised training be served in industry or commerce?"

The responses indicated: Yes - 62,9\%
No - 37,1\% 13)

A breakdown of the 1968 responses revealed that 77\% of respondents in commerce and industry favoured this compared with 47\% of principals in public practice.

Reservations have been expressed about the present system of articles and question 8 was designed to test the opinion of the profession about this.

Table No.: 13.
Analysis of Responses to Question 8

Assuming that a supervised practical experience period prior to qualification is required, should this be:

a) under the present system of articles, 53,0
b) or a service contract with free transferability, 44,8

or other 0,8

No opinion 1,4

100,0% 14)

Once again from the analysis of responses in Table Number 13, it is very clear that the status quo is preferred, although a large number favour a service contract with free transferability. The detailed statistics reveal that 75\% of

14) For detailed statistics see Annexure B.7.
academics and 54.9% of chartered accountants below the age of 31 advocate a service contract with free transferability. The older groups favour the status quo.

A third choice, namely that approved employers would issue certificates on completion of practical experience, was put to the group interviewed as part of this study. It was also stated that periods of service less than a minimum of eight months would not be recognised for practical-experience purposes. This countered the initial reaction that trainee accountants would leave at the drop of a hat. The responses of this group revealed a fair distribution among the three choices.

Many chartered accountants fallaciously believe that graduate entry is favoured by the profession. The responses to this question designed to test the opinion of the profession, as well as a detailed analysis of the register of articles at the Public Accountants' and Auditors' Board for the last six years, reveal a disturbing trend.

Table No.: 14.
Percental Analysis of Responses to Question 9

Are you in favour of making a university degree a pre-requisite to the commencement of the supervised practical experience period?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>No opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>36.8%</td>
<td>61.4%</td>
<td>1.8%</td>
</tr>
</tbody>
</table>

From the responses in Table Number 14, it is apparent that the profession does not favour graduate entry and this opinion is confirmed by the responses to a question on whether part-time attendance at university is satisfactory. There has been virtually no change in the opinion of the profession with regard to graduate entry. A similar question in the 1968 survey revealed that 34.2% favoured and 65.8% were against graduate entry.16)

15) For detailed statistics see Annexure B.8.
An analysis of the responses of the people interviewed reveals that a small majority is in favour of retaining the status quo, that is that matriculants be allowed to enter for a training period. A factor taken into account by the advocates of the status quo, is that economic considerations must not be overlooked as many students cannot afford the luxury of attending a university full-time. Another factor is that, from their own experience as principals, it appears that matriculants, because of the longer period of experience, prove to be better clerks. Those students with a degree tend to think that they are experts in various fields. Another factor mentioned is that the discipline, to which the clerk is subjected in a five-year period of training, is good. The protagonists for graduate entry are not very dogmatic, as many of them indicated that the part-time avenue should be available to those matriculants who desire to study part-time.

It is appropriate to examine the response to the question of whether part-time attendance at university is satisfactory.

Table No.: 15.
Percental Analysis of Responses to Question 15

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>No opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>66.8%</td>
<td>26.8%</td>
<td>6.4%</td>
</tr>
</tbody>
</table>

From the responses in Table Number 15, it can be seen that a substantial majority favours the status quo, finding the attendance at universities on a part-time basis quite satisfactory. The "no opinion" accounting for 6.4% could be attributed to the fact that many respondents in non-university centres did not express an opinion.

If the responses to this question are compared to those on graduate entry, a greater correlation between the positive responses to a graduate profession and the negative responses to the present system of part-time attendance at universities

17) For detailed statistics see Annexure B.14.
could possibly be expected. The lack of complete correlation could possibly be explained by the fact that certain respondents favour the attainment of a degree on a part-time basis prior to the commencement of the practical-experience period. An alternative explanation could be that respondents were inconsistent in their thinking.

A detailed analysis of the Public Accountants' and Auditors' Board's Register of Articles for all the provinces, for the years 1970 to 1975 inclusive was made. Table 16 reveals an increase in graduate entry during the six years. It is suggested that the graduate intake is unsatisfactory. This will be seen from statistics quoted in Table Number 17, indicating the number of degrees attained at various universities in South Africa during the years 1969 to 1975.

Table No.:16.
Analysis of Articles of Clerkship with the Public Accountants' and Auditors' Board Commencing during the Period 1970 to 1975

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage Graduates</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>20.2</td>
<td>168</td>
</tr>
<tr>
<td>1971</td>
<td>27.5</td>
<td>264</td>
</tr>
<tr>
<td>1972</td>
<td>27.6</td>
<td>248</td>
</tr>
<tr>
<td>1973</td>
<td>27.5</td>
<td>252</td>
</tr>
<tr>
<td>1974</td>
<td>34.0</td>
<td>356</td>
</tr>
<tr>
<td>1975</td>
<td>32.5</td>
<td>311</td>
</tr>
</tbody>
</table>

A comparison with Great Britain reveals that within the last few years the trend to graduate entry in South Africa is very much slower than that in Great Britain.

18) If the total number of trainee accountants is calculated from the above particulars, it will not reconcile with the figures in the annual report of the Public Accountants' and Auditors' Board. The difference, according to Mr. L. Myburgh, is accounted for by the fact that an adjustment figure in the report is the net figure between contracts registered and cancelled.
Available statistics indicate that as the number of graduates in commerce, economics, business administration and science is quite substantial, it is obvious that the profession is not getting its fair share of these graduates.

Table No.:17.
Degrees in Commerce, Economics, Business Administration and Business Science awarded to Whites by South African Universities for the years ended 30 June 1969 to 1974. 19)

<table>
<thead>
<tr>
<th>Year</th>
<th>Post-Graduate Degrees</th>
<th>Bachelors Degrees</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1969</td>
<td>233</td>
<td>791</td>
<td>1 024</td>
</tr>
<tr>
<td>1970</td>
<td>351</td>
<td>951</td>
<td>1 229</td>
</tr>
<tr>
<td>1971</td>
<td>351</td>
<td>1 103</td>
<td>1 454</td>
</tr>
<tr>
<td>1972</td>
<td>450</td>
<td>1 031</td>
<td>1 481</td>
</tr>
<tr>
<td>1973</td>
<td>364</td>
<td>1 074</td>
<td>1 438</td>
</tr>
<tr>
<td>1974</td>
<td>506</td>
<td>1 253</td>
<td>1 759</td>
</tr>
</tbody>
</table>

It is interesting to observe that during 1972, 16.8% of all first Bachelor's degrees were in commercial sciences. 20) In S.A.J. van Rensburg's projection for 1980 there are expected to be 1 690 first Bachelor's degrees in the commercial sciences, which, should account for 17.3% of all first Bachelor's degrees. His projection for 1990 reveals a projected number of 2 330 first degrees accounting for 18.0% of all first degrees. 21) Acknowledging that these projections could be upset by many factors such as economic recessions and political factors, which were not possibly anticipated at the time of the writing of his report, it is interesting to observe that if the accountancy profession makes a concerted


21) Loc. Cit.
effort to improve its image and its recruiting, there are sufficient graduates to be absorbed into the profession, if the profession decides on graduate entry.

11.3 Analysis or Responses to various questions dealing with Academic Issues

It is acknowledged that many respondents possibly do not have the background to give a well-reasoned answer, and also that educational approaches vary from one geographical area to the next. Nevertheless the responses are given with the comments of the academics being highlighted. Various questions with regard to a broader education, greater exposure at universities to various subjects and whether certain optional subjects prior to qualification should be allowed, were set.

Table No.: 18.
Percental Analysis of Responses to Question 12

Should the future accountant be exposed to a broader education allowing for additional optional subjects such as philosophy, psychology, sociology, etc.?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>No opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>47,1%</td>
<td>48,9%</td>
<td>4,0%</td>
</tr>
</tbody>
</table>

From the responses in Table Number 18. it is apparent that the profession is undecided whether a broader education, allowing for additional optional subjects such as philosophy, psychology and sociology, should be allowed. As negative responses accounted for 48,9%, "no opinions" could sway the result either way.

An analysis of responses according to occupation classification reveals that whereas chartered accountants in commerce favour a broader education, their colleagues in public practice do not favour this. University academics, strangely enough, do not appear to favour the concept of a broader education.

22) For detailed statistics see Annexure B.9.
Analysis according to age classification reveals that accountants below the age of 31 indicate a slight preference for a broader education.

The responses to the question testing respondents' views on greater exposure to university education in certain topics are shown in Table Number 19.

Table No.: 19.
Percental Analysis of Responses to Question 13

*Indicate whether the future accountant should have greater exposure to university education in the topics detailed below*

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>No Opinion</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Financial Management</td>
<td>87,2</td>
<td>7,1</td>
<td>5,7</td>
<td>100,0</td>
</tr>
<tr>
<td>b) Management and Related Techniques</td>
<td>80,0</td>
<td>11,6</td>
<td>8,4</td>
<td>100,0</td>
</tr>
<tr>
<td>c) Quantitative Techniques</td>
<td>46,3</td>
<td>31,6</td>
<td>22,1</td>
<td>100,0</td>
</tr>
</tbody>
</table>
| d) Computers  
  (i) Elementary Programming | 69,6| 16,7| 13,7       | 100,0 |
| (ii) Detailed Programming | 11,3| 62,9| 25,8       | 100,0 |
| (iii) Design of Computer Systems | 55,9| 26,7| 17,4       | 100,0 |
| (iv) Audit and Control Features of computers | 85,3| 6,7| 8,0        | 100,0 |

From the responses in Table Number 19, it is apparent that greater exposure is required in all the topics listed, with the exception of quantitative techniques and detailed computer programming. From the "no opinions" expressed on quantitative techniques it appears that either the term is not clear or the respondents did not have an indication of what is in the present syllabus. The former explanation may possibly be the more acceptable one.

23) For detailed statistics see Annexures B.10, B.11, B.12 and B.13.
Table No.: 20.

**Percental Analysis of Responses of Academics to various Topics as detailed in Question 13**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>No Opinion</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a) Financial Management</strong></td>
<td>80,0</td>
<td>8,3</td>
<td>11,7</td>
<td>100,0</td>
</tr>
<tr>
<td><strong>b) Management and Related Techniques</strong></td>
<td>61,6</td>
<td>21,7</td>
<td>16,7</td>
<td>100,0</td>
</tr>
<tr>
<td><strong>c) Quantitative Techniques</strong></td>
<td>53,3</td>
<td>31,7</td>
<td>15,0</td>
<td>100,0</td>
</tr>
<tr>
<td><strong>d) Computers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Elementary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programming</td>
<td>58,3</td>
<td>26,7</td>
<td>15,0</td>
<td>100,0</td>
</tr>
<tr>
<td>(ii) Detailed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programming</td>
<td>10,0</td>
<td>68,3</td>
<td>21,7</td>
<td>100,0</td>
</tr>
<tr>
<td>(iii) Design of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Systems</td>
<td>63,3</td>
<td>21,7</td>
<td>15,0</td>
<td>100,0</td>
</tr>
<tr>
<td>(iv) Audit and Control</td>
<td>76,7</td>
<td>13,3</td>
<td>10,0</td>
<td>100,0</td>
</tr>
</tbody>
</table>

From the responses of academics in Table Number 20, it is interesting to observe that generally academics favour greater exposure to all topics with the exception of detailed computer programming. It must be borne in mind that certain academics were influenced by the present content of their own courses, and if, in their opinion, these give sufficient exposure to the various subjects, they obviously would have indicated negatively.

It has often been contended that the education of chartered accountants should allow for streaming, that is allow students to specialise in certain subjects prior to qualification, depending on what their ultimate occupation or employment may be. One of the questions assessed the attitude of the profession towards this type of streaming.
Table No.: 21.
Percental Analysis of Responses to Question 14

Should the subjects prescribed for a student's academic education allow for certain options, depending on whether he intends entering into public practice or one of the other fields?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>No Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>57.9%</td>
<td>40.3%</td>
<td>1.8%</td>
</tr>
</tbody>
</table>

From the responses in Table Number 21, it is clear that the profession generally favours a streaming whereby a student's academic education allows for certain options, depending on whether he intends entering into public practice or one of the other fields. From the detailed statistics it will be observed that members in public practice favour this only marginally. The age classification analysis shows that accountants below 31 years are the greatest protagonists of this option. 24) A similar question in the 1968 survey showed 65.6% favouring such options, with 34.4% being against them. 25)

One of the questions referred to block release but it did not include block release in the true sense of the word. Block release may be described as a period of absence from the practitioner's office, to enable the trainee accountant to attend intensive study courses in preparation for examinations. The period of block release could vary from four to nine weeks. The first part of question 16 was whether some system of block release should be introduced and this principle is approved with 60.5% favouring it. The analysis showed that the members in commerce and industry approved of this principle whereas their colleagues in public practice are not so enthusiastic for obvious reasons. 26) Those who approved were requested to indicate their preference for a period of block release, but as the block release for periods of four weeks was not included and this was mentioned by a fair number, these statistics have been excluded.

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24) For detailed statistics see Annexure B.13.
26) For detailed statistics see Annexure B.14.
11.4 Post-Qualification Experience

In certain countries there is a requirement that a chartered accountant may not start his own practice as soon as he qualifies. The questionnaire tested the opinion of the respondents in this respect. An analysis of the responses in Table Number 22 indicates that such a requirement is favoured.

Table No.: 22.
Percental Analysis of Responses to Question 17

Should there be any requirements to acquire approved post-qualification experience with a practitioner before a member may be authorised to practise under his own name?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>No Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>55.6%</td>
<td>43.1%</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

The respondents who agreed to a post-qualification-experience requirement were expected to indicate the preference for such a period.

Table No.: 23.
Percental Analysis of Responses to Question 18

If your answer to question 17 is yes, what should the period of post-qualification practical experience be?

<table>
<thead>
<tr>
<th></th>
<th>12 months</th>
<th>18 months</th>
<th>24 months</th>
<th>36 months</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>33.0%</td>
<td>13.8%</td>
<td>48.3%</td>
<td>2.7%</td>
<td>2.2%</td>
</tr>
</tbody>
</table>

From the responses in Table Number 23 it is seen that nearly half the 1 320 respondents want a two-year practical-experience requirement. The second highest preference is a twelve-month period.

In the 1968 survey a similar question was posed.

"Should there be a minimum period imposed after completion of articles or other supervised training and success in the

27) For detailed statistics see Annexure B.15.
qualifying examination before a person may commence public practice on his own account?"

60.3% of the respondents favour such a requirement and 39.7% were against it.\(^{28}\)

The next question was whether the mandatory post-qualification practical-experience requirement should be waived if a chartered accountant was prepared to admit a newly qualified chartered accountant into partnership.

Table No.: 24.

**Percental Analysis of Responses to Question 19**

In the event of post-qualification practical experience becoming mandatory before a person may be registered as a practising accountant, should the requirement be waived in the event of a C.A. being admitted into partnership by another practitioner?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>No Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>44.8%</td>
<td>47.1%</td>
<td>8.1%</td>
</tr>
</tbody>
</table>

\(^{29}\)

It is seen from the responses in Table Number 24 that such an exemption is not favoured, although "no opinions" could make the difference.

A similar question in the 1968 survey revealed that 67.5% of the respondents were in favour of waiving such a requirement while 32.5% were against it.\(^{30}\) There appears to have been quite a difference of opinion in the views expressed in the 1975 survey. It is acknowledged that the results of the two surveys are not truly comparable, but such a vast swing does indicate a change in the thinking of chartered accountants.

11.5 **Required Continuing Education**

The attitude of the accountancy profession in South Africa to the principle of required continuing education was tested. The question posed in the questionnaire is reproduced in Table Number 25 with the percentage responses.


\(^{29}\) For detailed statistics, see Annexure B.16.

Table No.: 25.
Per cental Analysis of Responses to Question 22

<table>
<thead>
<tr>
<th>Should professionally qualified persons (Note: not only accountants) periodically give proof of competence?</th>
<th>Percental Analysis of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) by successfully writing examinations every five years?</td>
<td>2,1</td>
</tr>
<tr>
<td>b) by attending a prescribed number of approved courses every 2 or 3 years?</td>
<td>54,0</td>
</tr>
<tr>
<td>c) not at all?</td>
<td>42,0</td>
</tr>
<tr>
<td>No opinion</td>
<td>1,9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100,0%</strong></td>
</tr>
</tbody>
</table>

It should be noted that the question was phrased to apply to all professionally qualified persons, and not only the accountancy profession. It is apparent from the responses in Table Number 25 that 56,1% favour some form of required continuing education, either by attending courses or by successfully writing examinations. The results of the interviewed group reveal that 52,4% are in favour of required continuing education, 45,2% are against it, and 2,4% are undecided.

An analysis of the responses according to age reveals a definite trend. The younger accountants favour a required continuing education programme, and the older the accountants become, the more they resist such a programme. 66,5% and 60,6% of the responses of the age groups under 31 and 31 - 40 respectively favour continuing education. It is interesting and promising to observe that the future leaders of the profession, namely those under 41 years of age, are protagonists for required continuing education. If this stems from concern for public interest, it augurs very well for the future. It is only natural for members of the older generation to be against the introduction of required continuing education, and the percentages of the 41 - 55 and over 55 age groups respectively, indicate that 49,8% and 54,7% are against such mandatory education programme.

31) For detailed statistics see Annexure B.17.
An analysis of the views of accounting academics reveals that 63,3% favour some form of mandatory educational programme and these views coincide with those of their colleagues overseas. Most academics interviewed overseas favour some form of required continuing education, although a few expressed strong reservations against it, feeling that such a programme represents a form of empire building by those in charge of the profession. Another view was that the profession should place greater emphasis on the quality of the entrants to the profession.

The responses to the question, whether chartered accountants not in public practice should be exempt from a mandatory continuing education programme, indicate that the profession does not favour such an exemption. These responses are shown in Table Number 26.

Table No.: 26.

**Percental Analysis of Responses to Question 23**

*If continuing education were to become mandatory for chartered accountants, should C.A.'s not in public practice be exempt from this requirement?*

<table>
<thead>
<tr>
<th></th>
<th>No opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>38,9%</td>
</tr>
<tr>
<td>No</td>
<td>52,8%</td>
</tr>
<tr>
<td>No opinion</td>
<td>8,3%</td>
</tr>
</tbody>
</table>

32)

Table Number 27 indicates the breakdown of the courses attended by chartered accountants. These figures show that the in-office continuing education claimed is high, and it would depend on one's interpretation of what in-office education is. This would include formal discussions between audit managers on contentious accounting aspects and exposure drafts.

31) For detailed statistics see Annexure B.18.
Table No.: 27.

Analysis of Attendance at Courses during the last three years presented by: 32)

<table>
<thead>
<tr>
<th></th>
<th>The National Council of Chartered Accountants (S.A.)</th>
<th>Universities</th>
<th>In-Office</th>
<th>Other Institutions</th>
<th>Total</th>
<th>Average Number of seven-hour days</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Respondents</td>
<td>18.7</td>
<td>16.4</td>
<td>41.6</td>
<td>23.3</td>
<td>100</td>
<td>14.7</td>
</tr>
<tr>
<td>Occupation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Practice</td>
<td>26.2</td>
<td>11.7</td>
<td>49.3</td>
<td>12.8</td>
<td>100</td>
<td>16.0</td>
</tr>
<tr>
<td>Accountants not employed in public practice</td>
<td>10.0</td>
<td>19.2</td>
<td>34.9</td>
<td>35.9</td>
<td>100</td>
<td>14.1</td>
</tr>
<tr>
<td>Academics</td>
<td>10.1</td>
<td>55.0</td>
<td>8.9</td>
<td>17.0</td>
<td>100</td>
<td>17.3</td>
</tr>
<tr>
<td>Retired</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

These figures reveal a surprisingly high attendance which is possibly because the new Companies' Act, promulgated during the three-year period under review, resulted in many courses being attended. However, if the respondents who indicated that they did not attend any courses are ignored, then the average attendance reflects 19.2 days per respondent. On the face of it it may appear very satisfactory indeed, but a note of caution is necessary as the figures reflected can only be regarded as estimates, and an interpretation of what continuing education is, may differ among accountants.

Of the 2,373 respondents, 553 indicated that they did not attend any courses whatsoever, as Table Number 28 indicates.

32) Question 24 of Questionnaire
33) Four retired chartered accountants did indicate attendance at continuing education courses, but this has been ignored and not reflected under the heading 'Retired.'
Table No.: 28.
Analysis of Respondents who indicated no attendance at Courses according to Occupation Classification

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commerce and industry</td>
<td>242</td>
</tr>
<tr>
<td>Consultancy</td>
<td>8</td>
</tr>
<tr>
<td>Finance</td>
<td>33</td>
</tr>
<tr>
<td>Other</td>
<td>21</td>
</tr>
</tbody>
</table>

Public Practice:

<table>
<thead>
<tr>
<th>Experience</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal: less than 5 years</td>
<td>34</td>
</tr>
<tr>
<td>5 to 10 years</td>
<td>21</td>
</tr>
<tr>
<td>more than 10 years</td>
<td>88</td>
</tr>
<tr>
<td>Employee</td>
<td>41</td>
</tr>
<tr>
<td>Education</td>
<td>11</td>
</tr>
<tr>
<td>Retired</td>
<td>54</td>
</tr>
<tr>
<td>Total</td>
<td>553</td>
</tr>
</tbody>
</table>

The classification in Table Number 28 indicates that 184 chartered accountants in public practice did not attend any courses, and this means approximately one in six respondents did not do so. The ratio for chartered accountants not in public practice is approximately one in three, but this trend is to be expected.

11.6 Attitude of other Professional Bodies to Required Continuing Education in South Africa

Letters were sent to various professional bodies in South Africa, enquiring about required continuing education as a condition of reregistration periodically. The replies indicated that no other profession in South Africa has a mandatory continuing education requirement. Some of the replies indicated that the organisations were aware of developments in the United States of America of required continuing education by their own profession. However, the replies indicated that it was not an opportune time for such a requirement to be applied in South Africa.
The reply received from the South African Veterinary Association is very interesting. It is pointed out that their continuing education programme has grown to such an extent that a full-time director is needed to co-ordinate and promote it. The letter also states:

"It is our ideal that all our members be continually competent - a great challenge in this era of expanding knowledge. However, there are those who are satisfied with their lot or do not know what they do not know and to reach these uninspired colleagues, re-registration tied to compulsory continuing education may be a logical step." 34)

The replies of those professional bodies involved in public health, all recognise the importance of continuing education, but nothing is being done about a required programme.

11.7 Views of the Profession to the Potential Extension of the Attest Function and possible reduction of Responsibilities with regard to audit of the Small Private Companies

An analysis of the responses in Table Number 29 to the question detailed below, clearly indicates that the profession does not want to accept greater responsibility for the attest function to be extended to include an opinion on half-yearly financial statements, or on annual or other profit forecasts including the underlying assumptions or management effectiveness. The overwhelmingly negative responses are 65,5%, 67,3% and 62,3% respectively.

Table No.: 29.
Percental Analysis of Responses to Question 25

<table>
<thead>
<tr>
<th>Should the auditor accept greater responsibility by the attest function being extended to include an opinion on:</th>
<th>Yes</th>
<th>No</th>
<th>No Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Half-yearly financial statements</td>
<td>27,6</td>
<td>65,5</td>
<td>6,9</td>
</tr>
<tr>
<td>b) Annual and other profit forecasts including underlying assumptions</td>
<td>26,0</td>
<td>67,3</td>
<td>6,7</td>
</tr>
<tr>
<td>c) Management effectiveness</td>
<td>31,9</td>
<td>62,3</td>
<td>5,8</td>
</tr>
</tbody>
</table>

34) South African Vetc letter from the president, B.H. Peppin, dated
35) For detailed statistics see Annexures B 18 and B 19
An analysis of the detailed statistics reveals that no group, irrespective of occupation, age or academic qualifications, favours the extension of the attest function.

The reluctance of the profession to accept greater responsibilities may be because the implementation of the requirements of the new Companies' Act has created a substantial manpower shortage, and no doubt the added legal responsibilities, in the event of the attest function being extended, has contributed to this reluctance.

A review of the recent literature in South Africa has shown that, in the opinion of certain chartered accountants, the audits of small private companies should not be mandatory. The views are based on the situation in Rhodesia, where private companies, in certain circumstances, do not require auditors. The opinions of the respondents were tested and it appears from an analysis of the responses in Table Number 30 that the profession still believes that the audit of small private companies should be mandatory. Whether this stems from self-interest or is based on principle, is possibly another question.

Table No.: 30.
Percental Analysis of Responses to Question 26

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>No Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>53,8%</td>
<td>44,1%</td>
<td>2,1%</td>
</tr>
</tbody>
</table>


37) A detailed exposition of the underlying principles is given by Arnold Levenberg in an article, "Are Audits of Private Companies Necessary?", The South African Chartered Accountant, April 1976. He avers for many reasons that the private company audit is essential in an economy based on trust and fair dealing.

38) For detailed statistics see Annexure B.20.
An analysis of the detailed statistics reveals that chartered accountants in public practice and those in industry and finance and commerce tend to favour the *status quo*. The academics prefer that such audits be voluntary. An analysis according to age classification, reveals a very close correlation, with the exception of 62.0% of chartered accountants above 55 years of age who favour the *status quo*.

11.8 The Chi-Square Test ($\chi^2$) \(^\text{39)}\)

The question arises whether one would expect the responses according to the various classifications to bear a close correlation to the frequency responses as for the total responses. It is submitted that the replies of the respondents would not vary substantially depending on whether they have or do not have a degree, because most of the respondents with degrees have a B.Com., which is very much professionally oriented. The education of most respondents was similar in content, although the formal qualification differs in name. Thus there should be a close correlation between the frequencies of those that have degrees and those who do not have degrees. This would be the null hypothesis. The same cannot be said for the responses analysed according to occupation classification and with regard to age classification. It may be stated that the younger accountant will no doubt think quite differently from the more mature and more experienced older colleague in the profession. It is therefore appropriate to test the significance of the above statements, namely that the responses of people with or without degrees, should bear a close correlation to total responses and there should not be a close correlation in occupation classifications and there would also be a wide divergence between responses according to age classification.

\(^{39)}\) A discussion of the rationale and calculations of the chi-square test is available in any standard work on statistics. The application of the test in the circumstances pertaining to this study can be found in Minimum, Edward W., *Statistical Reasoning in Psychology and Education*, John Whiley & Sons., New York, 1970, Chapter 21.
To test this, the frequencies have been subjected to the chi-square test. The chi-square test provides a measure of discrepancy between expected and obtained frequencies. Its formula is:

\[ \chi^2 = \frac{(f_o - f_e)^2}{f_e} \]

\(f_e\) denotes the expected frequency and \(f_o\) denotes the observed frequency. The hypothesis with regard to the academic qualification should result in a very small value for \(\chi^2\). In Annexure C the \(\chi^2\) calculation for each question according to various classifications appears and a critical value is also given. In the case of the academic qualification the chi-square value should be smaller than the critical value given for it to be significant. The critical value for the various degrees of freedom are given at a probability level of 0,05. 40) With regard to the application of the chi-square test to the frequencies based on occupation classification and on age classification whereas stated above no close correlation is expected, then the chi-square value must be larger than the critical value as indicated in Schedule C. Thus the larger \(\chi^2\), the greater the confidence in the significance of the hypothesis as stated above.

Reasons for calculating a chi-square test are that an overriding test of the frequencies can be imposed by calculating the chi-square calculation for each question, where statements are not obviously significant this could be tested. Where items appear to be only marginally significant they have been exposed to a chi-square calculation at 0,01 probability level and if not significant at that probability level it is indicated as such in Annexure C. 41)

It will be seen from the calculations in Annexure C that the hypothesis appears to be valid with regard to occupation

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40) The degrees of freedom vary with the numbers of rows and columns in the table. This is important because the probability of obtaining a specific chi-square value depends on the number of cells in the table.

41) A small value of \(\chi^2\) indicates an absence of relationship between the variables, that is, statistical independence and conversely a greater value of \(\chi^2\) indicates a systematic relationship between the variables.
classifications and academic qualification classifications. In most cases the critical value in terms of the hypothesis is exceeded or less as required and the significance is indicated. With regard to age it appears that the hypothesis is not completely valid as many of the chi-square calculations do not comply with the expected critical values.

In the calculation of the chi-square test the "no responses" have been ignored as the opinion of the respondents was being tested and a "no response" does not indicate any preference whatsoever.

11.9 Conclusion

From the hypotheses as stated above it appears that the responses could vary according to the occupation of respondents. This is to be expected because of the influence of the occupation of the respondents. As stated above no significant variances would be found in the responses of respondents depending on whether they have a degree or not, because of the similarity of their education which has proved to be the case. The hypothesis that there should be a great divergence of opinion depending on the age of the respondents has not been proved entirely as the results of the chi-square test prove in Annexure C. However, it is significant that in the more critical questions, the hypothesis is proved to be correct. In questions applying to practical experience, service contract and free transferability, graduate entry, broader education, post-qualification experience, part-time attendance at universities, structure of the controlling bodies, required continuing education it is found that the hypothesis is valid. Many of the chi-square values indicating no significance are in the field of broader exposure to various subjects and this close correlation is possibly due to the fact that many respondents have had the same education and in terms of this education one could expect a closer correlation than would normally be the case with regard to other questions.
In the critical questions, it appears that the younger chartered accountants do favour a more enlightened approach, which augurs well for the future of the profession as the future leaders of the profession will come from these groups.
PART IV

PHILOSOPHY OF ACCOUNTANCY EDUCATION
CHAPTER 12

PHILOSOPHY OF ACCOUNTANCY EDUCATION AND TRAINING

AND OTHER CONTROVERSIAL ISSUES

12.1 The Role of Universities in Professional Education

Compared with universities in many countries throughout the world, universities in South Africa have played a major role in the education and training of accountants. It is, therefore, necessary to see what influence this has on the teaching at universities, and it is very important to define what the role of the university in education is. Historically, universities have endeavoured to be seekers of truth and systemisiers of knowledge. Academics at universities have endeavoured to pursue knowledge in isolation, far away from the realities of the harsh, outside world. The pragmatists in the harsh, outside world have generally scorned the findings of the academics in their ivory towers, as being irrelevant and pedantic. 1)

Today there is great divergence of opinion about the role of a university. It must be acknowledged that as there are few excellent researchers, it is necessary for universities to make a deliberate effort to select the brilliant researchers so that they may strive to improve the society of tomorrow. On the other hand, there has been great pressure on available resources aggravated by a constant man-power shortage as well. It must be borne in mind that as the universities are financed to a large extent by the general public they thus have a responsibility to society in general. An important question to be decided is: What should the universities teach? Is it the responsibility of the university to train a person to be proficient at the existing techniques and procedures of the profession which no doubt could be obsolete ten years later? Or is it the duty of the university to educate the student how to study, to do research which will give him a broad, analytical and enquiring mind, enabling him to solve complex problems and adapt to a rapidly changing society?

An eminent Australian educationalist, Sir Eric Ashby, in an article entitled "The Case for Ivory Towers", indicates that students need know four things only and they are:

"(i) A mastery of words and symbols of ideas;
(ii) an understanding (and, for some students, a mastery) of the concepts of mathematics as symbols of measurement;
(iii) a sufficient equipment of orthodox ideas in, at any rate one field to be able to use the ideas with confidence; and
(iv) a mastery of the accepted procedures for dissenting from orthodoxy and generating fresh ideas, expressed in words or in mathematics."

To put it into one sentence,

"... the touchstone of university studies is not to teach great truths but to teach truth in a great way." 2)

The question arises why theology, law, medicine, pharmacy, engineering and accountancy should be taught at universities, whereas typing and carpentry are not. The answer is that the professions catered for at universities require an understanding of complex theory, not simply the application of procedures learnt by rote. Another justification for teaching accountancy at a university is that a broad basis of academic knowledge is required for the practitioner to understand what he is doing in practice. 3)

It is imperative that there be communication between universities and the professions, and it is also important that one should not dominate the other. It is important that there be cross-fertilisation of ideas between universities and the professions.

One of the functions of a university as described by the Van Wyk De Vries Commission is:

"... to advance learning by bringing to light the knowledge amassed through the ages, by systemising it, and by incorporating every facet into the various disciplines as a component of the whole structure of knowledge, and by new discoveries through investigation and research; after basic knowledge and research have been transmitted to

2) Loc. Cit.

3) Ibid., p.8.
society to be employed there applied and directed science and research follow: briefly this function is the promotion of the humanities, the natural sciences and the applied sciences." 4)

Another function described by the Van Wyk de Vries Commission is the inculcation of qualities such as scholarliness and honesty, a scientific mind, perseverance and mental application, as well as the acquisition of a cultured outlook and a definite philosophy of life.5) The Van Wyk de Vries Commission considers that one of the functions is to prepare students to practise a profession, but with the reservation that purely practical professional training is not a university function.6) In its analysis of the relationship between universities and professional councils, the Van Wyk de Vries Commission states that there is good co-operation between universities and professional councils.7) It does, however, express a reservation that the professional councils have the power to exert a strong influence on universities in the formulation of standards, curricula and syllabi. The Van Wyk de Vries Commission points out that university academics, because of minority representation on respective education committees of professional councils, could be placed in a subordinate position. It suggests equal representation by the universities and the profession on education committees of professional councils. It states:

The professions should not dominate the universities in this matter nor the universities the profession.

The Van Wyk de Vries Commission warns that the curricula at universities must not over-emphasise the practical aspect, as this could result in the courses being purely vocational. If this is the case, a university cannot fulfill its true function, namely, the professional preparation of students.

The Van Wyk de Vries Commission sees the role of the university vis-a-vis professional education as follows:

"A profession should not be supplied with candidates who are only technically trained and equipped with the necessary applied and technical


5) Loc. Cit.

6) Ibid., p.74.

7) Ibid., p.163.

8) Loc. Cit.
knowledge; it should be supplied with well-developed and well-rounded persons of culture who have also acquired such knowledge, but will be able to apply it with greater understanding and to greater effect."

This view can be concurred with and it may be added that the professional accountant must be "educated" and not "trained" at the university.

12.2 Broader Education

A major criticism of professional education is that it becomes too specialised too soon so that students become unresponsive to certain classes of social problems that require an inter-disciplinary approach to solve them. Other criticisms levelled at the profession are that their members are not trained how to work with people or how to work as a member of a team. Professionals have been criticised for under-utilising the applied behavioural sciences. They lack the ability to sort out ethical and value issues inherent in their professional role, and they do not have the ability to continue studying during their careers.

There can be no doubt that a broader education for chartered accountants is desirable, and if a full-time academic programme were followed, a broader education would be part of the academic programme. Roy and MacNeill, referring to "A Broader Education" in the Horizons study repeatedly express the hope that the future accountants will be cultivated men and women. The broader education is seen as being concerned with humanity, i.e. with man himself, his heritage, the underlying philosophies of life, the language in which he

9) Loc. Cit.


11) Ibid., p.60.

MacNeill stress the importance of oral and written communication, but agree that it is impossible to insist that the future accountants study humanistic subjects during their university careers. The hope is expressed that on their own volition students will pursue the arts throughout their professional lives. 13) They stress the importance of English language communication to the extent that a candidate be denied admission to the profession if unable to communicate properly, even if this be the only objection. 14) They do qualify their statement that the proficiency be limited to commercial usage of a language with the attributes of brevity, conciseness and lucidity, the essential ingredients of reports by accountants to clients and the investing public. 15)

The importance of philosophy cannot be stressed sufficiently as logic and ethics play a very important role in the careers of accountants. Logic plays an important role in accounting and the double-entry system can be seen as a manifestation of logical relationships. Auditing, as well as computer programming, requires logic. It is superfluous to state that ethics plays a very important role in the career lives of accountants, and that the reputation of the profession depends on the ethical standards of its members. Roy and MacNeill state in this regard:

"We do not believe that ethical behaviour is determined by instruction in the manner of dogma or catechism but we do believe understanding to be contributory to propriety. We therefore recommend that each beginning CPA knows the ethical precepts upon which the profession stand, in order that his own future behaviour may enhance, not diminish, its stature." 16)

The Horizons study also stresses the importance of the behavioural sciences by underlining the importance of motivation, which may be used to great advantage, and they continue:

13) Loc. Cit.
14) Ibid., p.219.
15) Loc. Cit.
16) Ibid., p.218.
"In the same way behavioral research studies of communication, decision-making, innovation, conflict, leadership, authority, learning, perception and creativity are providing knowledge which cannot be categorically prescribed or, like a potion, applied but which can be understood and used to great advantage." 17)

It may be stated without fear of contradiction that most academics favour a broader education. The abovementioned requirements giving a broader education, as outlined by Roy and MacNeill, must be seen in the light of the American university programmes. The first two years of a four-year bachelor's programme consist mainly of a general education. Americans believe that these two years at university make up for certain deficiencies in school education. In a recent research study, sponsored by the Carnegie Commission, on higher education, "More Options, Less Time", it has been suggested that the four-year programme be reduced to three years. If this is implemented it will no doubt necessitate a reduction in the general content of degrees. It appears that during times of recession, relevant commercial degrees are regarded as being of substantial importance.

It thus appears that if there is a major time constraint, as well as problems in the utilisation of resources, the general broadening content of an academic programme may have to be sacrificed. It has been stated that no civilisation can afford to allow a substantial number of its population to spend several years at universities purely for cultural improvement. The community feels that the privileged few who attend universities should pass on the benefits of their knowledge to the general community. 18)

Besides the time constraint objection to a broader education, there are serious reservations whether a single course in philosophy, psychology, or sociology will really benefit the future accountant. As these are not generally terminal courses, and in fact more likely feeder courses, the lecturers

17) Ibid., p.17.
18) Risk, James M.S., "The Educational and Training Requirements of the Accountant of Tomorrow", a paper presented at the Jerusalem Conference on Accountancy, as reproduced in The Search for Better Solutions, The Institute of Certified Public Accountants in Israel, Tel Aviv, 1971, p.29.
will not have the time to point out their relevance to the student's ultimate choice of profession. It has also been stated that if special courses are designed in which wide-ranging fields of study are reduced to miniscule proportions, this is not likely to train candidates for disciplined thinking, be it intensive or extensive. 19) A noted academic, Michael Schiff, states:

"Many schools require the accounting student to take courses in quantitative methods, computer systems and behavioral sciences. But these courses are viewed as appendages to the traditional accounting courses and in only rare cases are they integrated into the accounting courses. This is reflective of a system which requires change. ... The real challenge is the integration of this material from the related disciplines within accounting courses." 20)

A noted academic, A.S. Carrington, stresses the relationship between behavioural sciences and accounting, communication, control systems, organisation structure, business objectives and states:

"Unfortunately all but elementary courses, and sometimes even these in psychology, tend to require a degree of specialised concentration on that discipline which carries the student far from his main field and often with little prospect of discerning the connections. In the absence of time constraints this would be of little concern, but in terms of professional preparation, again it suggests an urgent need for integration of material in studies beyond the first year level." 21)

From the abovementioned extracts it must be apparent that there are reservations about courses which are appendages to the relevant course content of a degree. It is imperative that the broadening aspect be integrated in later relevant courses.

12.3. Graduate Entry or Matriculation Exemption

A vexed problem facing the profession is whether the prospective chartered accountant should have a degree prior to commencement of the practical-experience period or not. A review of practices overseas finds the trend towards graduate entry gaining momentum. The socio-economic circumstances in each country must be taken into account in determining whether graduate entry is essential. What are the advantages stemming from graduate entry?

There are various advantages of a university education. The student has the opportunity of gaining a broader education as the pressures exerted on him are substantially less than when he is required to attend university on a part-time basis. The student will have the time to do more reading and will also be able to take certain non-relevant subjects which will increase his general knowledge. A degree requirement prior to the commencement of the practical-experience period would enhance the image of the profession as part-time study gives the impression of an apprenticeship scheme. Another important factor is that once the student has graduated, he will be a more mature person and be in a position to accept greater responsibility more quickly. A graduate will have been exposed to a certain amount of discipline at university and will have proved that he has a certain ability and competence. The advantage just cited, obviously depends on the standards of the individual departments at the various universities. There can be no doubt that the standards at various universities differ quite substantially. An additional justification for graduate entry can be found by looking at certain disadvantages of the present part-time educational set-up in this country. Greater breadth and depth of knowledge will be required in future and it is questionable whether the trainee accountant has the time to do sufficient reading. Part-time study must detrimentally affect the recruitment of the above-average student, and it has been stated that studying part-time is out of line with present educational sociological thinking. Another disadvantage of part-time study is the great stress under which the trainee accountant now has to work. Many accountants approach the
for the goose must be sauce for the gander”. Part-time attendance at universities may have been possible in the earlier parts of this century as well as in the fifties and the sixties. The majority of students are qualifying through part-time university attendance at this particular point in time. It has to be taken into account that the syllabi have been extended quite substantially during the last decade or so. In 1966 Richard G. Wuth saw the basic requirements of the newly qualified accountant as follows:

"a) Academic:

1. A proper understanding and appreciation of basic principles in all important areas of accountancy.
3. A mind trained to analyse and assess problems and to recognise the principles to be applied in their solution.

b) Practical:

1. A good professional upbringing with an appreciation of professional ethics and good behaviour.
2. Sufficient practical experience to recognise the relationship between theory and practice.
3. An opportunity to survey the various fields of endeavour in the sphere of accountancy in order to be able to decide in which fields to specialise." 22)

Wuth continues:

"The conclusion is inexorably reached that the only real solution to the profession's education and training problems is for the profession to determine its academic requirements and then look to the universities to provide these through the medium of an appropriate degree course. This course can be designed to make good some of the acknowledged weaknesses in the present system of general education and can pay due regard to the great importance of relating theory to practice." 23)


Wuth sees the only solution to the problem as being uninterrupted study on a full-time basis, and he questions whether part-time study with its known limitations should be countenanced. He further advocates a sandwich arrangement or internship so as to overcome the problem between the academic and the practical approaches.  

Opponents of graduate entry maintain that many students cannot afford to pay for full-time university education and the situation at home may require them to earn their own living. This argument is normally countered by the fact that there are bursaries available, and the question has been posed whether the profession should not actively stimulate the creation of a greater number of bursaries by individual firms. Protagonists of the status quo, namely matriculation as a condition of entry, maintain that the discipline resulting from working a full day, attending university and then doing the necessary assignments can only stand the future chartered accountant in good stead. The validity of this argument is not questioned, but what is questioned is the quality of education that a trainee accountant does get on a part-time basis.

The retention of part-time study is advocated by James M. Risk who states:

"Desirable though it may be to have a 'graduate' profession, for several if not many decades to come, many thousands and tens of thousands of accountants throughout the world will be educated and trained without the advantages of having spent several years at a university. On a world-wide basis, universities are for the privileged few."  

A justification for the retention of present requirements is the present manpower shortage and economic climate. It may also be argued that the intake will be severely restricted if graduate entry is a pre-requisite.

Many investigations into the educational requirements of the future accountant have come out in favour of some period of

24) Ibid., p.15.
full-time education. William J. Vatter in his survey of accountancy education in Australia, suggests two years full-time study followed by full-time employment for another four years with part-time study on a restricted basis. Vatter points out that if the entrance standards are too low the trainee accountant will not have the basic tools with which to qualify as a professional accountant.

A note of warning must be sounded and that is that members in public practice sometimes register a training contract of a student who does not have the potential to qualify as a chartered accountant. This is a retrogressive step and should not be condoned. It is a disservice to the trainee accountant as well as to the profession in the long term. It wastes energy and resources, and the person concerned should rather be placed in a working environment that suits his own capabilities. If the entrance standards are too low, the failure rate at universities and the long period it takes people to qualify as accountants can only harm the image of the profession.

There is no doubt that graduate entry is desirable, but seen in the context of the socio-economic conditions existing in South Africa it is difficult to envisage graduate entry being practicable in the next five to ten years. It is believed that the profession should endeavour to improve its image so that many more graduates at university who have possibly majored in other subjects in the commerce field, could be motivated to become accountants. It is important that the profession must eventually set a goal whereby graduate entry will be a pre-requisite. In Canada it is found that a trainee accountant may commence practical experience but is registered only when he graduates at a university. If the student does graduate, the practical experience gained prior to graduation is taken into account in assessing what practical


27) Ibid., pp.9/10.
experience still has to be completed.

A strong case is put forward for higher admission standards. Michael Schiff questions the validity of graduate entry on the strength of the different admission standards applied by various schools of business. Schiff suggests that students should be examined before they enter upon a course of study for admission to the profession at various universities. Schiff envisages that such tests will improve the quality of students admitted to accounting programmes, and states that the new accounting curriculum requires a high level student body. He continues:

"In the absence of stated standards on admission to study, the most forward looking curriculum staffed by a capable interested faculty will not achieve its objective since the inputs to the program do not possess the ability to cope with it." 28)

This puts another viewpoint forward, which may be acceptable in the highly competitive and affluent American society, but it is doubtful whether it is feasible in South Africa.

In the past, after reviewing the performance of the stragglers in the advanced classes at university and referring to their records, it has invariably been found that these students failed dismally in their first attempt at the elementary mathematical and statistical course at university. Supplementary examinations or another year was required by these candidates to pass the examination. Many academics believe that the ability to pass the Final Qualifying Examination of the Public Accountants' and Auditors' Board can be closely correlated with a person's mathematical ability.

It is believed that because the present circumstances in South Africa do not justify graduate entry, it is necessary that the entrance requirement be more stringent. It is suggested that a student must attain fifty percent for mathematics at the standard grade or a forty percent pass in the higher grade in the matriculation examination. It is further suggested that the prospective chartered accountant must have a fifty percent matriculation aggregate as well as a minimum of forty percent in both languages. Studies in the past have shown that when

admission requirements have been increased, the quality of the entrant has improved.

The abovementioned requirements may be harsh on a student who possibly does have the mathematical ability, but because his school did not have a good mathematics teacher, and it appears that they are scarce, he has not performed as well in mathematics as his capabilities permit. To overcome prejudicing a student, it is therefore suggested that if a student attains 40% and 33\(\frac{1}{3}\) % in standard and higher grade, respectively, his practical experience will be recognised, on the condition that if he does not pass his first year subjects without a supplementary examination, he must cease his studies. However, it is stressed, that the ultimate goal must be graduate entry.

12.4 Practical Experience Requirements

History

A perusal of the history of accountancy education and training reveals that a form of apprenticeship, articles or practical experience was an important means of gaining entry into the accountancy profession. The necessary skills required for the profession were obtained by working in the office of a practising accountant, and formal education played a very minor role, if any, in the educational process of the accountant. David Solomons refers to the Dean of the Harvard Law School who commented about accounting education as follows:

"The minds of accounting students are trained, but by and large, they are not stretched." \(^{29}\)

No doubt the practical-experience requirement does contribute certain skills to the prospective accountant, but nowadays serious reservations have been expressed about it. It is to be noted that the value of practical experience per se, is not questioned, but serious reservations have been expressed, by many academics and

certain professional institutes, about the value of practical-experience requirements as they exist today. The value of the practical-experience requirement is questioned not only because of the lack of control over experience but also because of a lack of a definition of what experience should be. On the other hand many practitioners as well as academics, are strong advocates of practical experience as it is regarded as being complementary to education. The first question that arises is what is experience.

The Shorter Oxford Dictionary gives this definition:

"To have experience of, to feel, ... the observation of facts or events, considered as a source of knowledge, ... the state of having been occupied in any study or practice ..., the qualification thereby acquired."

Experience may mean virtually any feeling or sensation to some people, whereas to others it may be a specific skill as to experience in the broader sense whereas it could be narrowed down to a process of personally observing or understanding things. This understanding arises from having observed or encountered or undergone some exposure to the practical ways of doing things. An attempt at defining experience in relation to accounting has been made by Barbara A. Clough who visualises three levels of experience.30) She sees the three different levels being life experience, broad business experience, the knowledge of life and the understanding of general broad social and cultural forces which affect the life of an accountant. An understanding of the business world, and the forces that affect him during a business day as well as an understanding of his role in business, communications and decision-making, form part of the broad business experience. Accounting experience is having gained the skill and the requisite knowledge of accounting procedures through observance, encounter and understanding of the various aspects of accounting in the practical environment of the office of an accounting practitioner.31) Clough states that the image of the profession will suffer if consistency of

31) Loc. Cit.
application of the practical-experience requirements cannot be assured.\textsuperscript{32) It is therefore imperative that the profession be able to define the type of experience that the prospective chartered accountant be exposed to.

It is necessary to look at some of the qualities which are possibly gained by a prescribed period of practical experience. These qualities have been summarised as: professionalism, technical competence and administrative ability.\textsuperscript{33) It is considered that the most important quality, stemming from practical experience, is the discipline to which the trainee accountant is exposed. The trainee accountant not only faces pressures and has to meet deadlines within the office, but also has to comply with various office procedures. Advocates of the practical-experience requirement maintain that the resultant discipline stands the future chartered accountant in good stead irrespective of what his ultimate form of employment may be.

The review of the practical-experience requirements in the United States of America has shown them to be so diverse that the image of the profession can only suffer. The practical-experience requirement may be as high as six years in some instances and not apply in other states at all. The experience may be attained in various types of organisations and the value of this experience may also be questioned. The requirements for practical experience, if confined only to public practice, have also been subjected to criticism, and certain quarters have requested that this experience be broadened. Bruschi states in this regard:

"Broad requirements are assailed as meaningless anachronisms that should be eliminated." \textsuperscript{34)}

Another question that arises is: Can experience be a substitute for education in our modern society? The answer can only be an unequivocal no. The chartered accountant will be faced with many complex issues in the future, and the tendency of overseas countries to accept a degree as a pre-requisite to entry to the profession is an indication of the importance

\textsuperscript{32} Ibid., p.799.


\textsuperscript{34} Ibid., p.23.
attached to formal education. The Beamer Report has suggested that the ultimate aim of the profession must be to accept a period of five years academic study and no practical experience.

Before accepting that this may possibly be the case, it is necessary to examine the advantages and disadvantages arising from the practical-experience requirements. Protagonists for the practical-experience requirements have stated that the experience gained by the candidate creates an awareness of the implications of professionalism. It has been stated that practical experience develops an understanding of professional independence. Opponents of the practical-experience requirement counter this argument by stating that implications of rules of professional conduct are dependent on qualities that stem from his life-long environment and education, and not just simply from experience as a trainee accountant. Advocates of the practical-experience requirement have stated that an awareness of the level of competence expected of a professional accountant is developed during the training period, and they state further that without the practical experience, an accountant could act irresponsibly causing damage to the reputation of the profession. This argument is countered by the belief that the trainee accountant is not being sufficiently extended during his experience period. The validity of the argument may not have been questioned during the first half of this century, but at this stage, accountancy education has changed its nature and scope quite considerably.

"Professional education is concerned with developing ability to order thoughts and with inculcating attitudes which characterize cultivated and ethical persons. And these attitudes are the values sought by the accounting profession in its recruits." 35)

Accountants who advocate the experience requirement, believe that the technical competence of the trainee accountant will improve because knowledge acquired cannot be imparted in the lecture room. In the office he learns the practical

applications of concepts taught at educational institutions. A further benefit of practical experience, it has been stated, is that exposure to experience makes it easier for the prospective chartered accountant to grasp the illusive concept of materiality. Those opposing the practical-experience requirement believe that the first year of experience as a junior accountant does little to improve the technical competence of the trainee accountant. They believe that essential elements of technical competence can be obtained from college study. Opponents of the experience requirement believe that shortages of manpower result in pressures being exerted on the principal so that the economic advantage of assigning repetitive tasks to the junior clerk predominate. This results in the trainee accountant doing these tasks quickly and accurately. It has been stated that a three-year practical-experience requirement may in effect be six months experienced six times over. It is further stated that during the first two years of experience a trainee accountant is seldom allowed to take important decisions with regard to auditing assignments.

A very strong argument in favour of the abolition of the practical-experience requirement is the lack of control exercised by the professional accounting bodies. Enquiries have revealed that very little effective control is presently being exercised by the professional institutes around the world. To a certain extent the market place determines which principals give efficient training. The market-place argument may be accepted up to a point, but it is believed that the profession throughout the world should ensure that the quality of experience is controlled, so that all trainee accountants may be assured of having the correct experience. In his analysis of the advantages stemming from the practical-experience requirement, Bruschi refers to administrative ability. This ability refers to the management of an accountancy practice as well as many other aspects such as personnel policies, policy appertaining to clients, how the firm attains its revenue and expenses, how professional fees are set. It has also been stated that a clerk is exposed to
the personnel problems of the firm. 36) It is further affirmed that the pressures of professional service are impressed upon the trainee accountant and the needs of the client are also illustrated. Serious reservations are expressed by the opponents of the experience requirement as to whether the trainee accountant will in fact be exposed to the administrative problems in his first few years of practical experience. These opponents of the practical-experience requirement do acknowledge that the quality of administrative ability is an admirable one. Agreement is expressed with the view of the opponents of the practical-experience period, that they will have no exposure (or very little) to the administrative problems of practitioners.

The practical-experience requirement has a major objection against it, and this is that the competence attained by the trainee accountant is basically limited to that possessed by his principal. John S. Millis succinctly states the position as follows:

"It seems to me that apprenticeship has one fatal flaw which makes it impossible to use in the current epoch, and that is its objective. The objective of the apprenticeship is the transfer from the master to the apprentice all that the master knows, and no more. Therefore the ceiling of education aspirations of the apprenticeship is the knowledge of the master. This was undoubtedly a valid educational objective in the nineteenth century, ...when the rate of discovery was relatively slow and the rate of discovery of new skill was even slower. But now our educational objective must be to provide a mechanism wherein the student of this generation may stand on the shoulders of all the preceding generations and then go beyond. Therefore the student must always surpass the teacher, and the apprentice must surpass the master." 37)

The abovementioned objection is indeed a very valid one and if practical experience is to be meaningful this problem will have to be overcome. The quality of experience of the trainee accountant will now improve as a result of

36) Ibid., p.32.
37) Ibid., p.39.
the introduction of a quality-review programme for practitioners, similar to the one instituted by the American Institute of Certified Public Accountants. If a quality-review programme is introduced, it is believed that this will lead to an improvement of the standards of practitioners. A detailed discussion of the quality-review programme is discussed in the chapter titled, "Required Continuing Education".

Professional education is seen by David Solomons as being different from mere education in that it is a combination of knowledge and skill in a subtle way.\textsuperscript{38) Solomons continues:}

"From this combination, with the maturity that comes from experience and given the essential personal quality of integrity - a quality which can be nurtured by professional experience but which has to be implanted by earlier upbringing - comes the rounded professional man. ... Where we have gone wrong in the past is in being too little concerned that those who can do things know what are the right things to do. Performing seals can do things, but they are not too good at dealing with unfamiliar situations or in creating new tools to solve new problems." \textsuperscript{39)

The formal American policy which is reflected in the Beamer Report favours education in lieu of practical experience, but A.S. Carrington states as follows:

"It is true that education is concerned with 'an understanding of underlying principles', but it is a poor sort of professional education if it contributes nothing towards learning how to apply that knowledge to practical ends. Since training, presumably, has the same objective, there is clearly an overlap or at least a common interface between education and training. ... It is better to view the total process of preparation for the profession as capable of being dealt with, in part, by means of a formal educational programme and, in part, within the more specific context of job-directed instruction. The division should be made on the basis of which is the more effective way of dealing with particular material." \textsuperscript{40)

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\textsuperscript{38) Solomons, David and Berridge, T.M., Op. Cit., p.101.}
\textsuperscript{39) Loc. Cit.}
\textsuperscript{40) Carrington, A.S., Op. Cit., p.25.}
It is important for academics, as well as practitioners, to bear in mind that each group can make a positive contribution to the endeavours of the other group. There are certain aspects that can be better taught in the lecturer room which assist in the development of a mental set - a professional attitude that should have breadth and sufficient depth to ensure that the student is properly prepared for further development in the practical environment. Practitioners can ensure that academic education is more meaningful by imparting a true, working knowledge of complicated auditing and accounting matters in the real world.  

Another reason advanced for education in lieu of practical-experience requirements is the greater objectivity of measuring the compliance with educational requirements over practical-experience requirements.  

With regard to the practical-experience requirements it has been stated:  

"It must be stressed that the value of practical experience per se, is not in doubt; it is acknowledged that people learn by doing and that there can be no substitute in any profession for the knowledge, skills and judgement acquired from many years of experience. What is in effect questioned is the absence of guidelines defining suitable practical experience as well as the necessary control to ensure that the experience gained is of the right quality."  

Many academics believe that students should be exposed to practical experience during their academic career. Many of these academics however, do not favour part-time study and believe that a system of internships is desirable. The student is released from responsibilities on the campus,


and works for a term, or a part of a term with an accounting employer. In certain countries the employer need not only be an accountant. In Australia it is found that during the third year the student is released completely from academic responsibilities and finds employment either with an accounting firm or any firm in commerce and industry or finance. An important characteristic of the internship is that there should be continuation of communication between members of faculty and their students. An alternative approach to internships is the co-operative system whereby a student attends class and works for employers on an alternating basis. The cycle varies and in some instances four months academic study will be followed by four months employment or alternatively the period may be six months on a similar alternating basis. The advantages of student internships appear significant and the results of an empirical internship survey reveal:

"Student internships are generally considered to be both educationally and practically advantageous. Educational benefits stem from the diversity of actual experience generally afforded to the student. In a practical vein, many employers feel that the internship programs present an opportunity to attract high quality entrants into the profession." 45)

Student internships or co-operative programmes assist in countering the criticism that there is no contact between the academic and the real-life situation. The introduction of internships, or a sandwich arrangement, has been propogated in South Africa as far back as 1966. Richard G. Wuth propogated the introduction of such a sandwich arrangement in his paper "A Graduate Profession" presented at the Third National Congress of Chartered Accountants (S.A.). 46)

45) Carpenter, C.G., and Dascher, P.E., Op. Cit., p.120.
12.5 The Conceptual Approach to the Teaching of Accounting and Related Subjects

A group of accounting academics, consisting of Professors Fertig, Miller, Mueller and Sprouse, formulated a proposal on which the educational philosophy of the conceptual approach is based. A part of the proposal reads as follows:

"The importance of accounting as a whole to a private enterprise society suggests that the first course in accounting should not be influenced by the educational needs of prospective accounting majors. Instead it should seek to convey to a general audience of college students the conceptual content of accounting, the overall scope of the accounting function, and the interpretation of accounting reports. Furthermore it should, in analytical terms, have a primary educational objective of informed citizenship. As such, the course should be important for all college students without regard to major area." 47)

The major difference between this and the traditional introductory accounting course, is a shift away from the traditional "preparer of accounting information" premise to a "function and social role of the accounting discipline" premise. 48) Briefly it means a radical shift from a producer of accounting information to a user function. The course is designed to introduce the student to the whole discipline of accounting during the first course. There will be exposure to financial, managerial and social accounting, as well as the attest function.

The difference between the procedural (technique-oriented) approach and the conceptual approach to the teaching of accounting can be compared to different learning theories. The contiguity learning theory is described as "we learn by doing". 49) In other words, one learns from one's experience. The conceptual approach can be compared with cognitive learning theory. Cognitive theorists strongly emphasise


48) Loc. Cit.

the intellectual processes of human beings and their role in learning. 50)

The question may be posed: Is it really necessary for the terminal student in the introductory course, in other words, the student who has no further interest than the introductory course, to be proficient in the balancing of trial balances, to be doing bank reconciliations, writing up ledger accounts, and so forth? This student, when he finally chooses his profession, will no doubt employ an accountant to do the routine work for him. In this respect, it is acknowledged that the objectives of the educators, who formulated the new approach to accounting, have been correct. A student requires a broad over-view of what accounting is all about.

An examination of the views of eminent authorities is of great interest. The authoritative work, Horizons for a Profession, strongly advocates the conceptual approach, believing that it is very difficult to simulate the world of affairs in academic situations, because they lack the essential ingredient of reality. 51) The book religiously favours a conceptual approach stating that if subjects are dependent on experience and if there is a shortage of time they should be the first to be winnowed out. The Report of the Committee on Education and Experience Requirements for CPAs under the chairmanship of Elmer G. Beamer, endorses the conceptual approach, as outlined in Horizons for a Profession. 52) Prospectus for a Profession also highlights a conceptual approach stating that academics in the past have shown too little concern with what are the right procedures to follow, and have emphasised rather how procedures should be carried out. An analogy is drawn with seals that can do things that they know, but are not good at dealing with strange situations. They cannot create new tools to solve new problems. 53) A protagonist of the conceptual approach is Michael Schiff, who pleads for the integrat-

50) Ibid., p.174.


ion of various courses, such as quantitative methods, information theory and the behavioural sciences, into accounting courses. He does not consider these courses to be simply appendages, and he endorses the new introductory course which has been developed and tested by academics at the University of Texas and the University of Washington.  

Members of the profession have varied views towards the conceptual approach. Carl J. Bohne Jr., a director of training of one of the large international firms, agrees with the broad objective of university education to prepare a student for his future career, and admits the value of the conceptual approach, but expresses reservations whether the procedural approach in accounting education should be abandoned entirely. Bohne states in this regard:

"The relative merits of the conceptual versus procedural approach cannot legitimately be assessed because business conditions have changed so dramatically from the time when most accountants were educated under the procedural approach."

A former academic, R.K. Mautz, who is now a partner of one of the large international firms, and who has criticised academics for being too theoretical in approach, writes:

"Applied accounting needs an educational system that gives attention to the preparation for a professional career. In that preparation, conceptual understanding is important but also important are technical skill and a professional attitude."

The problem is thus one of balance. In the transition to a new introduction to accounting, it may be difficult to find the correct balance in the first course, but it appears that the later courses should become more procedural in approach.


56) Loc. Cit.

A South African academic, who has been very much involved in the teaching of the new approach, believes that it is not necessary for a student to write up a set of books and prepare a set of accounts in order to be in a position to appreciate the issues and controversies inherent in accounting. Chris Burns states in this regard:

"I do not believe this argument is educationally tenable. Revenue and expense recognition, relation valuation issues, current value accounting, the strengths and weaknesses of the conventional accounting model, etc. are the very stuff of our discipline. You do not have to be able to put through adjusting journal entries for stock losses to appreciate the controversial nature of the former topics." 58)

It may be beneficial to scrutinise more closely the experience of the University of Natal in its introduction of a new approach to the teaching of accounting.

12.6 ANITA as taught at the University of Natal

The experiences of the University of Natal, (in Durban) in implementing a new introduction to accounting (ANITA), are reflected in an article entitled, "A New Introduction to Accounting - A Review of the First Year". 59) To state that the introduction of the new approach was traumatic, may be an understatement. The practitioners in Durban regarded the introduction of a new introduction to financial accounting as horrific. This reaction may be motivated by self-interest. The new approach does not guarantee that students will be proficient in some of the basic techniques, such as writing up cash books, bank reconciliation statements and posting to ledgers and balancing trial balances, and so forth. Under the ANITA approach, there is limited exposure to techniques in the first year, possibly not sufficient to make the students as proficient

58)  Loc. Cit.

as the practitioners would like them to be. A practitioner asked if the emphasis of ANITA is now placed on accounting in a user function, and no longer as producer of accounting information, who is going to produce the information in future.

The views of the Department of Accounting are reflected in the following quotation from a paper by P.J. Seneque:

"I believe that accounting is an academic discipline and as such has a proper place at the university. It is an academic discipline precisely because it offers a rich and highly normative approach to its studies. ... The inter-disciplinary nature of accounting can be stressed and the students made aware of the relationship of economics, mathematics and behavioural sciences to accounting if the emphasis is placed on the conceptual approach. The accounting educator cannot afford to mirror the practising accountant. If he does so he is of little use to the practitioner or to the student who will join the professional ranks."  

Seneque then maintains that if universities are to teach skills and techniques instead of why and for what, then accounting has no place in a university curriculum. Many academics will agree with this viewpoint. The balance between conceptual and procedural approaches is seen by Carrington as being the understanding of the underlying philosophy, on the one hand, which should contribute towards the application of that knowledge to practical ends on the other. He further states that education and training do have certain common ground in that they do have similar objectives.  

The experience at the University of Natal has shown that the lecturer as well as the seminar leaders have found the new approach a great challenge, and those seminar leaders, who had reservations about the first year students coping with the new course, were pleasantly surprised at the manner in which the students handled the course material.  

60) Seneque, P.J.C., Problems in the Teaching of Accounting at a University, a paper presented at the Teachers' Training Programme for South Africa (A Joint Programme of South African universities at the Graduate School of the University of Stellenbosch), September 1975, p.10.  


testing student reaction found it to be overwhelmingly positive. The response to a question whether the experience in the introductory course had affected the student's choice of a major, indicated that 10% decided to take Accounting II, and 29% felt more inclined to take Accounting II. 57% indicated that it had not affected the selection of a major. Only time will prove whether the course will succeed in attracting more students to second and final year courses in accounting. If the course succeeds in doing this, it will be beneficial for the profession in the long run. It appears that the 1976 enrolment for the Accounting II course is the highest ever.\(^{63}\) Bachelor of Accounting students indicated that they would have preferred exposure to the bookkeeping section of the course, which takes up 20% of course time, at an earlier stage. This matter is receiving attention and it is intended to have this section presented earlier in the year.

The question arises whether the profession has not completely abdicated its responsibilities. If the profession provided a "bookkeeping course" at the beginning of the year, would it be necessary to change the structure of the course? It may be debatable whether techniques will not assist in the understanding of the concepts. It is important to bear in mind that the major portion of the students taking Accounting I have no intention of majoring in the subject.

The examination papers of the Department of Accounting at the University of Natal (Durban) were sent to sixteen South African academics from ten universities, and five comments were received. Four of the comments were positive and one non-committal. One comment of the head of a Department of Accounting reads:

"In our opinion the paper is of a high standard. If students were able to cope with it they must have reached a very much higher

\(^{63}\) This information furnished by P.J.C. Seneque, Head of the Department of Accountancy at the University of Natal, Durban.
standard than we expect of our first year students." 64)

The views of an academic in the United Kingdom reflect the following:

"I feel that the paper represents a considerable improvement on previous papers I have seen from South African universities." 65)

In an analysis of the prospects, and in retrospect, the authors, Burns and Seneque, observe that the most vocal critics of the new approach have been practitioners, and they submit that the majority of critics base accounting on a definition by the American Institute, published in 1941, which refers to accounting as

"the art of basically recording, classifying and summarising ... transactions and events which are, in part at least, of a financial character ...":

The Department of Accounting at the University of Natal has adopted the following definition of accounting:

"Accounting is defined as a discipline which deals with the design, management, and evaluation of information systems as they relate to decision-making processes incident to societal and enterprise goals." 66.

The conclusion of the article reads as follows:

"There is no doubt in our minds that our new introductory course is a success. In one or two areas there is room for improvement. This will receive our attention in 1978. But taken as a whole and as a matter of principle we are confident our approach is correct. ..." 67)

Certain academics may disagree with these sentiments but the ultimate success of this approach will depend on how the intermediate and subsequent courses are structured. The intention is to build the second course on the concepts developed in the first course. The emphasis will again be on information prepared for users of accounting information,

65) Loc. Cit.
66) Ibid., p. 100.
67) Loc. Cit.
and emphasis will be on financial reporting and the provision of information to internal and external users who require the reports for making decisions. 68)

The advanced course will be more professionally oriented. Problems are anticipated about what should be left out of the advanced course. Seneque suggests:

"... that to do full justice to the needs of the accounting-major student the advanced accounting course should not only imply specialisation in accounting topics. It requires a focus on advanced concepts and principles so that the student is exposed to the principle of 'divergent thinking' requiring imaginative thought and inventive solutions to problems as well as 'convergent thinking' which leads to logically correct answers. At this level the use of open-ended case studies as compared to accounting problems and exercises commends itself. In real life there is seldom one absolutely correct solution to a problem." 69)

If a prognostication may be ventured, the annual address by the incumbent of the President of the Natal Society (hopefully Chairman of the Durban Regional Society) in 1986 may contain the following:

"The practitioners in Durban were very critical of the Accounting Department at the University of Natal a decade ago. Experience has proved that the accounting graduate from the Department of Accounting at the University of Natal, which utilises a conceptual approach to the teaching of accounting in the first two years, have proved to be more efficient than practitioners anticipated ten years ago."

It is believed that the conceptual approach may produce better accountants because the students will have greater exposure to the underlying philosophy of accounting, and will not be so preoccupied with preparing one accounting tutorial after the other. This approach must surely allow the student much more time for reading, which can only be beneficial in the long run. A caveat which must be sounded is that there

must be a move to a more professionally-oriented approach in the final year.

It must be stressed that a balance between the conceptual and the procedural approach must be maintained.

The deliberations resulting from the controversy regarding the conceptual approach at Natal University, it is believed, will eventually be in the interests of teaching of accounting at universities, as well as in the long-term interests of the profession. The controversy has resulted in those concerned with accounting and accountancy education re-examining their philosophy to the teaching of accounting.

A schism in the accountancy profession does not facilitate the educator's task. This schism manifests itself in the fact that there is a de facto multi-tier profession. The large firms of accountants and auditors would prefer the academics to adopt a conceptual approach to auditing. They would like to see the university academic teaching the philosophy of auditing, i.e. the 'why' and not the 'how'. The larger firms feel that they are better equipped to impart the application of auditing concepts than their colleagues at universities. The smaller and medium-sized firms would like to see the universities teaching the philosophy as well as the application of the techniques. This approach is quite understandable considering the facilities available to the smaller and medium-sized firms.

The following question arises: Is it possible for an academic to teach the applications of auditing, if he does not have constant and regular exposure to the practical vagaries of auditing? The other problem encountered by the academics is that it is very difficult to simulate real-life situations in the lectureroom. It is acknowledged that case studies can simulate real-life situations to a certain extent only. It is believed to be imperative for the auditing lecturer to have experience in exercising his judgement about the scope and extent of tests, as well as in deciding what is material and what is not material.
The correct approach, it is suggested, is one of the following. The auditing lecturer in the department of accounting and auditing must spend at least three months of every two years, preferably as one period, working for a large firm of accountants who use modern auditing techniques. Alternatively, staff training partners of large firms should be asked to conduct lectures on a modular basis. The latter suggestion is preferred. This would ensure that the staff training partner, who has the necessary experience of the applications and who is in constant contact with the latest developments within the profession, will be imparting the latest developments to the students. A member of the department can still have control of the subject, but this latter approach will ensure that students are being exposed to the latest developments.

The suggested modules of the Price Waterhouse Study Group for the introductory accounting course are detailed below:

**MODULE 1: THE NATURE AND FUNCTION OF ACCOUNTING**

1. Scope of Accounting
2. Accounting in Decision-Making Processes
3. Characteristics of Information Systems
4. Communication of Accounting Information

**MODULE 2: ACCOUNTING AND ITS ENVIRONMENT**

1. Economic, Social, Political, Legal and Organizational Interactions with Accounting.
2. Accounting as a Social Force
3. Accounting for the Firm
4. An Historical Perspective on the Interaction of Accounting and its Environment: Antiquity to 1900
5. Evolution of Accounting in the United States
6. Nature and Role of Accounting Under Different Contemporary Socio-Economic Systems

**MODULE 3: VALUATION AND MEASUREMENT OF ECONOMIC RESOURCES**

1. Welfare, Wealth and Income
2. Valuation Concepts
4. Limitations in the Implementation of Valuation Concepts
MODULE 4: A TRANSACTIONS APPROACH TO ACCOUNTING MEASUREMENT

1. Foundations of the Conventional Accounting Model
2. Accounting Conventions and Their Impact on the Measurement Process
3. Accounting Reports
4. Introduction to Financial Statement Analysis

MODULE 5: DATA ACCUMULATION

1. Accounting Data Capturing Processes
2. Accounting Data Classification and Transformation

MODULE 6: CONTEMPORARY FINANCIAL ACCOUNTING FOR PROFIT-SEEKING ENTERPRISES

1. Measurement of Assets
2. Measurement of Equities
4. Preparation of Traditional Accounting Reports
5. Preparation of Special Purpose Accounting Reports

MODULE 7: CONTEMPORARY ACCOUNTING FOR INDIVIDUALS AND NOT FOR PROFIT ORGANIZATIONS

1. Reporting the Financial Affairs of Individuals
2. Accounting Measurements in Organisations Not Operating for Profit

MODULE 8: MANAGERIAL ACCOUNTING

1. Management Decisions and the Need for Accounting Information
2. Management Decisions and Organizational Goals and Constraints
3. Decision Choice, Decision Implementation, and Relevant Information
4. Accounting Information for Short Run Decisions
5. Accounting Information for Long Run Decisions
6. Extension of Long Run Decision Problems
7. The Budget as a Comprehensive Planning Device
8. Performance Evaluation and Control

An outline of the course taught at Natal University is detailed below:

<table>
<thead>
<tr>
<th>PART A</th>
<th>Approximate Number of Lectures</th>
</tr>
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<tbody>
<tr>
<td>1. The Nature, Function and Environment of Accounting.</td>
<td>4</td>
</tr>
<tr>
<td>2. Accounting With Regard to Resource Allocation, Decision-Making and Information Systems.</td>
<td>2</td>
</tr>
<tr>
<td>3. Valuation in relation to investment decisions.</td>
<td>4</td>
</tr>
<tr>
<td>4. The conventional accounting model.</td>
<td>6</td>
</tr>
<tr>
<td>5. General Price Level Adjustments and Recognition of Current Exchange Rates.</td>
<td>4</td>
</tr>
<tr>
<td>6. Institutional influences on accounting Theory/Practice.</td>
<td>2</td>
</tr>
<tr>
<td>7. Revenue/Expense recognition and related valuation issues.</td>
<td>8</td>
</tr>
<tr>
<td>8. Resource flows: Income, Cash, Working capital.</td>
<td>2</td>
</tr>
<tr>
<td>9. The Attest Function in financial reporting</td>
<td>2</td>
</tr>
<tr>
<td>10. Managerial uses of Accounting Information.</td>
<td>6</td>
</tr>
</tbody>
</table>

PART B

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\begin{align*}
1. & \text{ Concept of double-entry} & 10 \\
2. & \text{ Conventional Accounting Records} & \underline{50} \\
\text{TOTAL} & & \underline{60}
\end{align*}
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12.7 Specialisation within the Profession

The oft-quoted term "knowledge explosion" illustrates the rapid growth of knowledge during the twentieth century. It has been stated that the development of knowledge during the

first half of this century has far exceeded knowledge accumulated since the beginning of recorded history. 72) It has further been affirmed that knowledge since 1950 has quadrupled and certain authors, endeavouring to look into the future, have stated that the volume of knowledge will double every five years. These thoughts are no doubt frightening, but the accountancy profession will have to provide for the realities facing it. It has been contended that the explosion of knowledge applicable to the accounting profession has not been as dramatic as that in other fields, but it is stated that there has been a tremendous explosion of expectations, with regard to the accountancy profession. It may be pointed out that society's expectations of the accountancy profession will increase in future, and the accountancy profession must see these demands as opportunities, regarding them not as problems but rather as challenges. Adam Smith's principle of division of labour also applies to the professions, and the ultimate division of labour in a profession will result in specialisation.

The question may be posed: What is specialisation? A definition of an accountancy specialist reads:

"... is one who knows more about a particular sector of the broad universe of accounting than most of his professional colleagues." 73)

It has often been stated that specialisation is a process whereby one learns more and more about less and less, and this definition can ultimately lead to the absurd situation with the specialist knowing everything about nothing. The latter definition does however sketch one of the problems resulting from over-specialisation. This problem is referred to by John L. Carey who states that if a person is pre-occupied with the study of one field of knowledge in great depth, he runs the risk of becoming intellectually blind, forgetting how his field relates to other fields and to society as a


whole. He further states that the ability to adapt to changing circumstances is lessened, or, putting it another way, the risk of obsolescence increases.\textsuperscript{74)}

An analogy can be drawn with the development of specialisation in the medical profession where through the evolutionary process of many general practitioners, one has witnessed the development of many specialist fields in medicine. A patient consults a general practitioner before being referred to a specialist. The accounting profession has also become more specialised through an evolutionary process. The rapid increase in the volume of knowledge, as well as the demand for a wider range of services by the clients of public accountants, has resulted in the accountants specialising as well.

An examination of the various types of accountancy practices reveals a trend towards specialisation. Each partner in a medium-sized firm will develop his own speciality, and if a client requests certain specialist advice, he will be referred to the partner with the relevant expertise. The large accountancy practices have specialisation to a much greater extent as they have various departments catering for auditing of electronic data processing installations, management advisory services departments, taxation departments, and estate planning departments. They may have specialists who cater for clients wishing to go public. This phenomenon of specialisation extends even further as some firms become known as specialists in certain industries. In South Africa it is found that certain auditing firms do a large proportion of the audits in a certain specialised industry or commercial sector. South Africa has also witnessed the position where firms are expected to prove their ability and competence to do stock broker audits. It can thus be concluded that there is \textit{de facto} specialisation within the accountancy profession.

The increased expectations of society and the greater demand for services, has resulted in a welcome development which is the merger of many firms. This has resulted in the firms, because of the number of partners, being able to specialise to a greater extent. South Africa has recently witnessed a number of amalgamations of large-sized firms and the absorption of smaller firms by the larger firms. It is believed that the trend in future will be many more mergers of small into medium-sized firms, so as to enable these chartered accountants to cope with the greater demands made of them. It has been stated that necessity is the mother of invention and these mergers will come about because of necessity. The fate of the smaller firm is more uncertain and Marvin L. Stone states in this regard:

"To me, it seems inevitable that the practice of public accounting by sole practitioners will virtually pass from the scene in favor of joint practice by association of CPAs." 75)

This view is not shared by John H. Lawler who sees the position as follows:

"... there is every reason to believe that it will (the small firm) continue to share in the overall prosperity of the profession.

The firm which is primarily interested in providing a general service will be needed. ... The specialist may create awe; but the generalist in any profession is the one who is cherished as a continuing source of aid and comfort." 76)

It is believed that there will always be scope for the small practice, but at the same time the merger of the very small practices is to be encouraged so that these practices may develop into medium-sized practices. The resultant benefits are the obvious greater competence to render services of a high quality to the public. One problem facing the very small practice is a resistance to a referral system whereby clients could be referred to specialists. An inherent danger in this resistance is that some practitioners may accept assignments for which they do not have the necessary competence. The existence of the small practice will no doubt continue for

a long time, as many people, because of certain personality traits, cannot adapt themselves to a larger organisation.

From the above it can be noted that it is not the case of when specialisation in the accounting profession will become a reality, but how a formal system of specialisation can be effected within the structure of the profession.77)

Many chartered accountants seem to resist the formation of a formal specialist register on the grounds that there is de facto specialisation in the profession anyway. It is submitted that a formal structure of specialisation within the profession should result in an improved quality of service being rendered to the public. The possibility has been mentioned of a sole practitioner possibly accepting an assignment beyond the limits of his own competence. This can not only harm his reputation, but also the image of the profession and be detrimental to the general public.

The formal acceptance of specialisation within the profession does result in many problematical questions arising. The problematical questions are: In what fields should specialists be developed? How will competence as specialists be proved? What designations will apply to these specialists? What are the implications on the size of firms in professional practice? Will the specialist operate on his own or form part of a large firm of accountants? Another problem confronting the profession is how to overcome the narrowness of interests of specialists.

In determining what specialities should be provided for, it is necessary to state the premise, that all future chartered accountants should have the same level of competence at the point of qualification. It is further submitted that the belief that all chartered accountants are equally competent, is fallacious. The fields of specialisation can be categorised in three broad fields, namely, auditing, taxation

and management advisory services. Within these three categories one has many specialist categories, and within the fields of taxation one can have specialists in company taxation, in estate planning, in taxation planning, in taxation of multi-national firms and so forth. In the management advisory services category there can be many specialities. In the fields of auditing, certain specialists are found, but the importance of the generalist must not be overlooked.

The scope of accounting practices has been given much attention recently, and it appears that the profession in the United States of America does not envisage the curtailment of certain services presently being rendered. An important factor that should be borne in mind is that the market place is a very good indicator of what is expected of the profession.

The answer to the question, how specialisation will be attained is problematical and it can be foreseen that universities will develop specialist courses and build up reputations for these. However, the accreditation of specialists will have to be left to the profession. It is therefore necessary, that if universities are to play a great role in the specialisation of chartered accountants, there be co-operation between universities and the profession. It is believed that it will be necessary for members of the profession to assist the universities in providing these courses, and the ultimate entrance examination should be a combined effort between members of specialist panels in the profession and university academics. It is further believed that a minimum period of practical experience in the particular field is imperative for the future specialist. It must be stressed that every specialist must be a competent general accountant prior to specialisation, and this will counter the argument that the creation of a specialist register could be divisive. The common bond between the general accountant and the specialist will be the successful completion of a Final Qualifying Examination, and the designation of C.A. (S.A.).
Another problem facing the profession is whether non-chartered accountants, employed for their expertise in specialist fields within the accountancy firm, should be recognised in some way or another. It has been suggested that certain minimum levels of accounting, auditing and taxation be attained by these non-chartered accountants prior to their being given a C.A. designation. The members of the profession in the United States of America were unhappy about this suggestion. John Lawler envisages the long-range goal of the profession to be that nearly all future specialists should be CPAs, and states that unless this is the case, it may lead to tensions within the profession.\(^{79}\)

Another problem that will require the attention of the profession, if specialist registers are created, is how to identify these specialists. The problem has been discussed by H. Justin Davidson, and in the American context he has suggested four designations: CPE - Certified Public Examiner; CPTA - Certified Public Tax Adviser; CPC - Certified Public Consultant and CPG - Certified Public Generalist. The designation CPA - CPE would indicate that the man has the minimum competence required for the CPA and that he has chosen to practise primarily but not exclusively, in the accounting and auditing field. The designation CPA - CPG would refer to a generalist recognised as a specialisation. Davidson draws the analogy of the CPA - CPG meaning the accounting equivalent of the family doctor.\(^{79}\) Davidson does not envisage that accreditation will allow only those accredited to practise as specialists in those specific fields.

In the South African context, opponents of the formation of a specialist register argue that if a person wishes to specialise, he may be able to attend courses at universities, and the university qualification will indicate what his speciality is. This argument can be countered by the fact that the mere attendance and the successful completion of a specialised course at university will not necessarily result in the candidate really being a specialist. The practical


experience is as important as the academic education. The following designations may be suitable for the profession in South Africa:

- **C.A.(S.A.) (P.A.A.)** - Chartered Accountant in practice as Public Accountant and Auditor
- **C.A.(S.A.) (M.A.S.)** - Chartered Accountant specialising in Management Advisory Services
- **C.A.(S.A.) (Tax.)** - Chartered Accountant having specialised in taxation

A special accreditation board will have to be formed to define the standards and syllabi of the various specialist spheres. Sub-committees will be formed with members setting examinations for the specialist areas. No grandfather clauses should be permitted; that is, if a person states that he is a specialist, he should have sufficient confidence in his own competence to complete the necessary requirements successfully. Initially those chartered accountants who believe that they have the necessary competence need only write the prescribed examinations. In a transitional period of two or three years anybody desiring to be registered as a specialist could attempt the examinations, without attending relevant university courses. They would, however, have to give proof of relevant, approved experience of a minimum period of, say, three years.

The effect of specialist registers on the structure of the profession may not be as profound as some accountants believe. It may be stated that a multi-disciplinary approach to the profession will be required to ensure that the profession will be able to meet its demands. No doubt certain specialists will prefer to practise on their own, but it can be visualised that most specialists will form part of a team in a large or medium-sized firm.80)

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Attempts at instituting a referral system in South Africa have proved to be a dismal failure. It appears that accountants have an inherent fear that they will lose clients who are referred to another firm. It has been suggested, to counter this possibility, that the consulted firm may not be appointed auditors of the referred firm for a period of three years. This, it is affirmed, is a restriction on freedom of choice. However, if this restriction will make the referral system successful, it may have to be applied.

With all professions vying to attract the cream of the school-leavers, the creation of a specialist register may result in attracting a better quality student to the profession. The image of the profession will have to be presented in a dynamic manner and this will require long-term planning.

For obvious reasons much has been written about greater specialisation being required in the future. The question that the profession must ask itself is: whether the specialisation should be recognised formally. It is believed that the profession should investigate the implications of the creation of a specialist register, and set itself the goal of creating this register within the next five to ten years. It is by no means an easy task, as is witnessed by the fact that the creation of a formal specialist register has been discussed for more than a decade in America, and in its last survey the matter was again referred to a committee for a special investigation into all the implications.81)

12.8 Accounting Technicians

Time is a very scarce commodity in this quick developing world. Chartered accountants find that their time is at a premium, and to utilise time to its best advantage it should be spent in the solution of complex problems. Nevertheless despite the introduction of modern auditing techniques there will always be a certain number of routine tasks to be performed. Division of labour, if taken to its ultimate

in the accountancy profession could find the skilled and complex work on the one hand being done by certain people and routine work on the other hand being done by other people. The skilled and complex work could lead to the formation of specialist tiers, and the routine and simpler tasks to the formation of accounting technician tiers. The possibility of the creation of a technician tier has not been favourably received and it is wondered whether the reluctance to accept this stems possibly from fear. It has been stated that the greatest insurance policy for the accountancy profession in South Africa is the Companies Act, because irrespective of the quality of service provided by the practitioner, every private company must have an auditor. The existing practitioner possibly fears that the accounting technician will insist on greater rights such as doing the audit of small companies. The accounting technician must be seen in proper perspective. He will be doing technical work such as writing up books where this is still done manually and assisting in routine audit procedures. A review of the position in the various countries reveals that the Australian Society of Accountants and the Institute of Chartered Accountants of Australia have approved the Institute of Affiliate Accountants. In Scotland the Higher National Diploma in Accounting Studies is also recognised by the Scottish Institute, and, subject to certain conditions, the holder of such a diploma can eventually become a member of the Institute if he complies with certain educational and practical-experience requirements. The Institute of Chartered Accountants in England and Wales did make provision, in its policy statement of May 1972, for an accounting technician. In *A Policy for Education and Training* provision was made for junior staff, referred to as accounting technicians. To date the English Institute has not instituted a lower tier.

Solomons suggests two pre-requisites to ensure that a technician grade will be successful. The first condition is for the accounting technician to belong to an organisation

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he can trust, and which will promote his welfare and interests. He must obviously be a voting member of such an organisation. The second condition is a designation indicating his qualification.\textsuperscript{83) In The CPA Plans for the Future, John L. Carey also discusses the possibility of technician specialists and states:}

"CPAs might find it useful to encourage accreditation of technicians in subprofessional areas of the accounting function. The day may come when groups similar to nurses, pharmacists and laboratory technicians could be highly useful to CPAs."\textsuperscript{84) Carey discusses the possibility of young people, not having the ability to qualify as CPAs, performing invaluable duties as junior staff assistants. With adequate supervision these people could perform routine tasks very efficiently.\textsuperscript{85) In South Africa the COBOK Report recommended the creation of a second or junior tier, members of which would not be allowed to practise as accountants and auditors, but would be able to function as secretaries and bookkeepers. It was envisaged that a candidate for the junior tier would have to complete three years' service, registered with the Public Accountants' and Auditors' Board in the office of a registered accountant and auditor in public practice.\textsuperscript{86) In its motivation for a junior tier, it appears that the profession wanted to ensure that certain people would be retained in the profession. With mathematics being a subject required for entry by some universities at that time, and presently mathematics is a requirement for certain accounting departments, the intake to the profession would diminish. It was also felt that many candidates who could not complete the Certificate in the Theory of Accountancy for a variety of reasons would possibly qualify for the lower tier and could be retained within the profession. The creation of a lower tier was also seen as providing the black accountant, whose educational standards may not be sufficient to admit him to university, with a qualification and he could then also perform useful functions."

\textsuperscript{83) Loc. Cit.}
\textsuperscript{84) Carey John, L., Op. Cit., p.461.}
\textsuperscript{85) Loc. Cit.}
within his own community. It was also felt that this would alleviate the staff problem of the smaller practices who could possibly not provide all the training facilities necessary to meet the higher standards of the future. Another reason given for the creation of a second tier was the anticipated rate of economic growth which would make greater demands on qualified chartered accountants to take up management posts in commerce and industry.

The recommendations did provide for the accounting technician to progress from the junior tier to the higher tier. It was envisaged that these examinations would be set by the organisation designated by them to set the examinations. The recommendations for the junior tier detailed the school leaving certificate as being the entry standard. Tuition was to be provided through colleges for advanced education, technical colleges and correspondence schools with the examination to be set by the colleges under the aegis of the Public Accountants' and Auditors' Board. It was further envisaged that these members could become junior members of the provincial society and also be subject to the rules of professional conduct. The body of knowledge applicable to the lower tier included subjects such as accounting and auditing, company law, mercantile law, and other regulatory legislation, taxation, data processing, general business knowledge and comprehension and communication.

Antagonists of a lower technician tier in South Africa aver that a de facto technician grade exists anyway and a formal creation of such a tier is not necessary. Other arguments against the formation of a lower tier are that members of this tier will insist on practising rights. The legislation should not allow this, but should provide for the technician to progress to a chartered accountant if he has the ability. It is further argued that other professional bodies do provide for such technicians anyway. This is a valid argument, but the rules of professional conduct applicable to the accounting profession do not apply to them. It is also propogated that a specialist tier be formed, with the present chartered accountant being the lower tier. This does not solve the problem of who will perform the routine tasks.
It is therefore recommended that the profession seriously consider sponsoring the formation of an organisation to cater for accounting technicians in which they will receive recognition and status. It is further recommended that if members of this organisation indicate a minimum average achievement, of say 60%, in their examination, they be able to qualify as chartered accountants, after complying with certain academic and practical-experience requirements. As the profession will be sponsor of this organisation it will be able to monitor standards. Liaison with other institutes is necessary to achieve maximum effectiveness.

It is recommended that the course content be similar to that prescribed by the 1969 COBOK Report, which is reproduced in Annexure I.

The tuition may be catered for by the Colleges for Advanced Technical Education and universities could provide conversion courses for Certificates in the Theory of Accountancy which should enable the accounting technician to qualify as a chartered accountant.
CHAPTER 13

THE COMMON BODY OF KNOWLEDGE

13.1 Introduction

It is a complex problem to decide whether a common body of knowledge should be described in detail by professional institutes or whether broad outlines should be given. If a detailed list is given, the common body of knowledge could possibly have a stultifying effect on academic institutions. A disadvantage of detailed common bodies of knowledge is that they could become obsolete very quickly. It is therefore desirable that a common body of knowledge should be flexible. A review of the syllabi for various aspects of professional accountancy education reveals a diversity of approach. Some institutes' give a detailed outline of the requirements, whereas others tend to give a general outline.¹)

What criteria should determine what should be included in the common body of knowledge? There is the perennial time constraint as well as the decision making. A.S. Carrington has defined four criteria for determining whether an item should be included in a curriculum or whether its time should be dramatically cut.²) These criteria are: probable utility, which is seen as the given skill or quality proving useful during the entrant's entire career; disaster potential, which is the measure of disadvantage or disaster in the event of the item being omitted from the programme; teachability, which is the relative efficiency with which these skills can be taught by academic institutions compared to the possibility of these skills being acquired in a practitioner's office; complementarity, which Carrington describes as the simultaneous acquisition of two skills or qualities, or reinforcement of the one by the other. Carrington gives a high rating for short-term skills but questions the accuracy of predictions and is aware of ideas becoming obsolete. The disaster criterion could exclude specific

¹) See Annexure H for extracts from selected syllabi of accounting institutes around the world.

techniques, which could readily be learned by a competent practitioner as the occasion demands. Broader qualities and skills, fundamental to individual and collective professional development and survival, must be included. Teachability will no doubt depend on the prejudices of the teacher, but what must be decided is where subject matter can be taught most effectively, and if it is of a professional nature and could be taught better by a practitioner, there is no doubt where it should be taught. Carrington sees complementarity being achieved by the study of general skills such as the diagnosis of problem areas, the ability to make decisions on the basis of inadequate or uncertain data, and the development of logical approaches to unstructured problems. 3)

The design of curricula, it has been stated, is best left to academic institutions. The following was said by B. Garner:

"Concerning the recommendations of 'the common body of knowledge', it should be emphasised that the study does not spell out a curriculum with an all-purpose, all-pervasive nature; such matters are properly left to the judgment of academic institutions." 4)

It is submitted that broad outlines should be given for the required course content, because if too much detail is specified, academics may be inclined to accept the course as prescribed without giving much thought to the contents. It must further be borne in mind that the approaches to the teaching of subjects differ substantially, the timing differs from one university to another and the time allocated for various subjects also differs quite materially from one university to another. The accounting bodies can give broad outlines and regularly liaise with academic institutions concerning their requirements. If it is felt that an academic institution does not comply with certain minimum requirements, the professional institute need not accept it as a recognised teaching institution. Diversity of approach at universities is to be welcomed and Carrington states in this regard:

"The less conformist institutions, at times, may appear to be too independent in their approach to professional requirements,

but they may more than compensate for this by the pioneering of adaptation to new developments. The value of this independent and innovative attitude is undoubtedly a major reason why all the major recognised professions have developed their education firmly within the university structure. If education is primarily geared at perpetuation of existing norms of practice, professional development and innovation can become lost causes."

An important factor to be borne in mind in the definition of the required body of knowledge for the future chartered accountant, is whether the accountant will have a certain period of academic instruction on a full-time basis or not. It is submitted that a student who obtains his first degree through full-time study will have had a much broader education. It can be argued that many liberal-arts subjects can be included in an accounting curriculum but what will the ultimate value of this education be? Most courses are designed to meet the needs of a student majoring in a specific direction. It can further be argued that many subjects such as psychology, sociology, history, political science could be included - all these would no doubt contribute towards a broad education, but it is imperative to decide, considering time limits, as well as financial and economic problems, whether the end result is satisfactory. Carey states in this regard:

"The field of human knowledge is so broad that no four-year course can hope to comprehend it all. The danger is that the student may taste a smorgasbord of many dishes without much lasting nourishment." 6)

Society, which indirectly finances the universities to a very large extent, cannot afford the luxury of allowing so many young students to broaden their education without deriving

5) Ibid., pp.35/36.
any benefits from this.

The aim of this chapter is not to define the detailed common body of knowledge, but rather to suggest certain additions to or deletions from the common body of knowledge, or possibly to indicate changes in emphasis. In the United States of America an over-view of the common body of knowledge indicates a de-emphasis of professionally-oriented subjects, so that accounting and accounting related subjects, including the use of an elective, account for 20% only of a four-year curriculum. Computers and quantitative techniques account for approximately 21%. It is significant to note that business law accounts for 3.3% only, and economics accounts for 10% of the total four-year programme. If the possibility is borne in mind that four-year programmes in America may be reduced to three-year programmes these percentages will no doubt increase and the general education will be sacrificed. 7) A review of the situation in the Netherlands reveals that law accounts for 4.4% only, mathematics, applied mathematics and statistics account for 11.5% and economics and business economics account for approximately 25%. Accounting i.e. techniques, is given 5.6% only and other aspects of accounting are included in organisation and administrative organisation, which together with business information account for 21.5%. Auditing theory accounts for 15.6%. It should be observed that emphasis on subjects varies from one country to the other. 8)

In 1962 a sub-committee of the Education Committee of the Public Accountants' and Auditors' Board published a report on the education and training of accountants, and the suggested curriculum indicated that professional subjects accounted for approximately 60%, legal subjects for 20% and general education also approximately for 20%. A closer examination of the suggested times reveals the following: Accounting requires 30% of the suggested 1085 hours, which is not in line with present day thinking, because of the growth in the body of knowledge and the devel-

7) For a detailed breakdown of the American programme, see p.75.
8) For a detailed breakdown of the Dutch approach see p.126.
opment of computers. Economics accounts for only 6% of the time, company law for 17\% and mercantile law (including rights and duties of trustees and executors' accounting) for 12\%. Auditing accounts for 15% of the suggested curriculum. 9)

The common body of knowledge suggested by the Common Body of Knowledge Committee of The National Council of Chartered Accountants (S.A.) did not outline the number of hours per course, but just indicated the total number of university courses required to meet the requirements of the common body of knowledge.10) Although the division of courses on a course basis instead of contact hours would not be comparable to the 1962 suggested curriculum, it does reveal certain changes. Accounting, auditing management controls and taxation accounted for 50% of the suggested curriculum with company law accounting for 12\%. Financing and management accounted for 12\%, with mathematics and data processing accounting for 12\%. Practical business economics and comprehension and communication accounted for 8\% each. Nearly 22\% of the suggested curriculum was devoted to accounting and nearly 16\% to auditing. It is submitted that auditing has been over-emphasised in the past and possibly the subject has been made too difficult. From the abovementioned information it can be seen that the education of accountants has been very professionally oriented. The question that arises is in what direction should the accountancy education in South Africa move.

It is proposed to review certain areas of accountancy education and the practices overseas to determine whether their experiences may be applicable to South Africa.

13.2 Computers in Accountancy Education

A trite observation is that computers will play a substantially greater role in the information system in the future. There can also be no doubt that the number of computer


installations will increase dramatically within the next ten to fifteen years. It is thus essential that the accountant of the future have sufficient knowledge of the computer so that he has the necessary competence to deal with it and its problems. One of the major problems facing educationalists in the accountancy field is whether the student should be able to write computer programmes or not. There can be no doubt that many accountants seem to have an inherent fear of the magical box called the computer. How does one design an educational programme that will eliminate this fear? It has been stated that for the accountant to overcome this particular fear, he must be able to write elementary programmes and debug them. On the other hand people have contended that it is not necessary to write programmes and debug them because a chartered accountant will not be expected to programme as such. A very interesting self-instruction programme has been developed by the University of New South Wales in Australia. This programme consists of a tape, workbook and a 35mm film strip. The equipment required is a tape recorder, and the "corral" which houses the little screen showing the various concepts graphically illustrated. A student has three hours in which to work through the programme. Various concepts are illustrated and the tape recorder gives an instruction at a certain stage that the student has to follow using the computer to enforce the concepts learnt. In the computer laboratory they have twelve "corrals" and five computer terminal points. The experience at the University of New South Wales has been that the objective of the designer of this approach, Philip Grousse, has been met, as it is not intended to make programmers out of the students, but to dispel the fears the students have of the computer.

A review of the syllabi regarding electronic data processing, shows very diverse approaches. At many universities it is found that the computer is being integrated into various courses and being utilised as a tool in a learning situation. It has been stated that the computer benefits the learning process in a variety of ways, and the first is that the student gains a needed measure of understanding and appreciation of
computer capabilities and potential, which results in a reduction of the fear of the computer.\textsuperscript{11}) The second advantage resulting from the use of a computer as a problem-solving tool, is the possibility of an enhanced understanding of analytical techniques.

The third advantage of using the computer in a teaching role is that it reduces the computational burdens involved in analysis of complex problems, with the result that a wide range of approaches could possibly be utilised to solve a problem. The student thus has the opportunity to spend more time on the substantial issues and less time on detailed work involved in such cases. This could result in a better understanding of the problems involved.\textsuperscript{12})

Certain lecturers overseas expect their students to write programmes for use in the solution of complex problems in management accounting. The underlying philosophy is simply that to be able to write the programme, the student needs to understand the basic principles in detail. This approach is based on five learning theory concepts. The explicit objectives are that the lessons should be directed towards specific behavioural objectives, that is, that the student should understand and identify with the studies. The second concept is "bits" of knowledge, that is the inputs of knowledge are in small logically sequenced increments which lead to a rapid comprehension of the subject matter. The third concept is the active role of the student as this participation improves and sustains the learning process. The fourth concept is self-pacing which enables the student to progress at his own individual pace. The fifth learning concept is immediate reinforcement, that is, the learning process improves when direct responses are reinforced immediately and incorrect responses are eliminated immediately.\textsuperscript{13})

Computer-assisted instruction programmes have been developed at the University of Illinois at Urbana-Champaign. The

\textsuperscript{12}) \textit{Ibid.}, pp.163/164.
\textsuperscript{13}) \textit{Ibid.}, pp.164/165.
student utilises the computer to teach himself a subject in his own time. The development of such programmes is very costly. It took 8 000 man-hours to develop the first semester material for elementary accounting. The cost implication (including cost of hardware) makes it impracticable to consider such an approach in South Africa.

In the United States of America it is expected that the newly-qualified certified public accountant will have a basic knowledge of at least one computer system and of one computer language, as well as the ability to chart or diagram an information system of modest complexity.

A South African viewpoint by Brian Burrow sees the needs of the accountants in three areas. Firstly he should be familiar with the principles of computer systems design so as to enable him to specify the controls that are to be built into the system. Secondly he should have enough knowledge about programming languages to be able to look through a programme listing in sufficient depth to be able to decide for himself what a programme is doing, and whether it is complying with its specification. Thirdly it has been stated that he should have sufficient knowledge of computer operations, both on-line and off-line, to be able to make a valid judgement on the effectiveness of the methods and data security controls in use. In describing a data processing curriculum for South African universities, P. Sulcas believes that very little emphasis should be placed on actual programming because it is submitted that the future accountant will not be a programmer, but be involved in systems analysis and design.

14) McKewn, James C., Computer-Assisted Instruction for Elementary Accounting, Faculty Working Papers, College of Commerce and Business Administration, University of Illinois at Urbana-Champaign, June 1974, p.6.


16) Burrow, Brian, "Where has all the data gone?", South African Chartered Accountant, February 1976, p.54.

During November 1975 the Education Committee of the Public Accountants' and Auditors' Board approved a syllabus for data processing, including the use of computers as compiled by one of the universities in South Africa. This syllabus does not emphasise programming and it is submitted that students write and debug elementary programmes. This exposure should eliminate the fear and magic surrounding the computer.

It is suggested that universities place much greater emphasis on computers in the educational process from an early stage in the academic careers of students. It is also necessary that the exposure to the auditing of computer systems be on a much greater scale than previously, and it is submitted that the expertise of the large firms should be used. Computers are changing so rapidly that it is necessary for the larger firms, that have the expertise, to be contacted to assist in imparting the necessary knowledge to the students. It would also be commendable if one or two of the universities were to concentrate on computer education in great depth and thus build up a reputation for their courses on data processing for accountants. Thus those students who wish to specialise in accountancy as well as data processing, should be given optional subjects at a few universities to ensure that they have a greater than average knowledge of computers. This is based on the philosophy of the University of Waterloo's Co-operative Program in Mathematics. There can be no doubt that many accountants with above-average expertise in data processing will be required in future.

13.3 Economics in Accountancy Education

In the past economics has played a major role in possibly stilting the development of accounting as an academic discipline, especially in the United Kingdom. The philosophy in the forties was that the accountancy students were

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18) Sulcas, P., Op. Cit., pp.59/60. This syllabus covers the depth of knowledge required by the Public Accountants' and Auditors' Board and the various universities have been advised of this by the South African Society of University Teachers of Accounting (Newsletter - Number 8.).
Basic economic truths form the basis of postulates in accounting, which lead to the formulation of accounting principles, on which accounting methods and procedures are based. Economics is therefore important because not only is the basis for accounting practice formed from it, but also the measurement of income is derived from it. Economics involves the science of decision making about the utilisation of scarce resources, and it is concerned with an analysis of maximising benefits. Economics must be seen both in the broader, that is macro sense and in the narrower sense, that is the micro sense. Macro economics, which refers to the economy in general, covers principles of the entire economic environment, and governmental policy as a major impact on allocation of scarce resources. Income, as well as employment policies, is of great importance, and national income, monetary and fiscal policy, the banking system, international trade and balance of payments are all aspects which affect the economy in the broader sense. It is very important for the accountant of the future to have an understanding of how macro economics affects the financial environment. The rapid growth of multi-national groups, the problems resulting from inflation will no doubt be of great importance to the future chartered accountant. With the rapid development of high speed international travel, the world has become a really small place which has resulted in an expansion of the economic world. Micro economics will provide the necessary perspective for the future accountant to see how the firm operates in a national economy. Micro economics relating to the firm plays a great role in the accountant's life, and


the accountant reports on the economic decisions of the firm. The accounting process relies heavily on economic concepts, and accountants report on the economic events of firms. This information is used by firms to determine whether the goals of their particular firm have been achieved. Roy and MacNeill see the relationship between economics and accounting as:

"The accountants' adaptation of economic ideas has produced mutations which differ significantly from the original, but the ancestry is clear and the accountant typically justifies his adaptation on the grounds that the necessity for making measurements in the real world requires modification to bridge the gap between theory and practical feasibility." 21)

It is necessary for the future accountant to have a greater understanding of micro economics including the use of the tools of economic analysis. It is necessary for the future chartered accountant not only to understand the interaction of economic forces, but also the relationship between price and demand and factors of elasticity, competition, labour productivity and the theory of government policies towards business. The importance of economics to the future accountant is seen by Roy and MacNeill as:

"... who does not understand the tools of economic analysis and who is not able to deal with economic concepts in prose, diagrams and mathematical equations can play only a limited role as an advisor to management." 22)

Micro economics also covers the capital market, and thus capital budgeting decisions are also based on certain economic principles. Price determination under perfect and imperfect competition and the theory of interest are important aspects.

It is submitted that many chartered accountants in practice will question the value of economics for the future chartered accountant's education. It is submitted that the chartered accountant of the future should be exposed to economics in greater depth, because the understanding of the economic

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22) Ibid., p.227.
exposure to economic theory will also have a broadening affect on the education of the accountant.

A review of the curricula of the various universities indicates that the educational programmes for accountants reveal a dearth of exposure to economics and economic theory. For the Certificate in the Theory of Accountancy a special course has been devised by many universities and the exposure of the students is limited to this particular course. It is submitted that the techniques could be reduced and certain of the present courses could be eliminated to provide for at least two courses in economics for the future education of the chartered accountant.

13.4 Law in Accountancy Education

It is imperative that a sense of balance be attained in the design of legal courses for accountants. It is acknowledged that the accountant is operating in a very complex environment, but it is submitted that at many universities in South Africa the legal education has been over-emphasised. The importance of company law cannot be sufficiently stressed, but it is submitted that the student's knowledge should be such that he has a conceptual understanding of the law involved and should know sufficient law to recognise a problem. It is submitted that if a complex legal problem is encountered in public practice, chartered accountants will normally obtain the opinion of a legal expert.

A cursory review of the legal system and its development should suffice. It is essential that the accountant of the future have a good grounding in contractual law as well as the law applicable to the various forms of organisation such as partnerships and companies. A trite observation indeed, to state that an understanding of company law, as it affects the accountant, is imperative. Legal responsibilities of accountants are of great importance as well. It appears that many universities teach company law as a separate subject which is repeated in great depth in the advanced auditing
courses. Although a knowledge of negotiable instruments is necessary, it is submitted that in the past the importance of this has been over-stressed. It is a very complex aspect of law and an in-depth understanding of negotiable instruments should be left to the legal students. In the past too much emphasis has been placed on the law of insolvent and deceased estates. It is submitted that with regard to deceased estates a broad outline could be given in the law courses, with the accounting for deceased estates being incorporated in a taxation and estate planning course. It is submitted that greater emphasis be placed on estate planning than on the actual technical procedures in winding up estates.

It is important that the chartered accountant of the future have an in-depth understanding of the Income Tax Act, but it is submitted that an in-depth knowledge of specialised areas such as mining, co-operatives, building societies, banks and so forth should not be required of the future chartered accountant. It is important that income tax planning and estate planning be taught to the future chartered accountant and an in-depth exposure should possibly be a post-qualification education.

A conceptual understanding of general legal principles is thus necessary. An in-depth knowledge of company and taxation law is required. It is wondered whether the obsession that universities have with the presentation of so many law courses does not tie up with the over-emphasis of auditing in the past.

13.5 Accounting in the Education of the Future Accountant

The question that arises is whether a detailed list of accounting topics should be prescribed in the common body of knowledge. A detailed list has a stultifying effect and it is submitted that the present common body of knowledge is given in too much detail. The common body of knowledge could
be defined in broader terms, and it is important that the functions of accounting be understood, as well as the communication that accounting information provides. The compilation of the financial statements, including an understanding of the underlying philosophies, is of utmost importance. Greater utilisation of computers in future will change the emphasis in accounting education. It is assumed that the accountant will have a thorough knowledge of the double-entry concept, but it must be emphasised that too much exposure to techniques will not be necessary. Computational ability could be de-emphasised as the computer, no doubt, will play a much greater role in the processing of business information. On the other hand, it must be borne in mind that the learning process will be strengthened or reinforced by exposure to techniques. Although knowledge of accounting will be essential as the accountant will assist in the design of management information systems. It is necessary for the future accountant to know the underlying theory applicable to measurement of income, as well as asset measurement, cost behaviour, and the sources of finance available. The future accountant would constantly be made aware of the contemporary issues involved in accounting. The legal requirements applicable to financial reporting, as well as the interpretation and analysis of financial information contained in the financial statements are important to the future accountant. Knowledge of advanced group accounts as well as implications of amalgamations, mergers and absorptions is also necessary. It is suggested that introductory management accounting concepts be integrated into accounting curricula.

13.6 Management Accounting in the Education of the Future Accountant

The nature of management accounting has changed quite dramatically during the last decade. It is no longer the simple cost accounting course which concentrated on the accumulation of costs and cost determination. It is important to realise that management accounting is an integral part of the management function. Therefore it

is necessary that management accounting be taught in an interdisciplinary manner involving an application of knowledge from the fields of economics, quantitative methods and organisational behaviour.\textsuperscript{24)

The objectives of management accounting education are seen as:

"... should aid the student in integrating accounting and measurement concepts with managerial performance. The student should be confronted with the need to develop appropriate economic criteria for performance in light of management's end structures. The impact of decisions on economic objectives and of economic objectives on decisions should be stressed." \textsuperscript{25)

\begin{itemize}
\item[A.] Management accounting should be related to the planning functions of managers. This involves:
\begin{itemize}
\item[1.] Goal identification
\item[2.] Planning for optimum resource flows and their measurement
\end{itemize}
\item[B.] Management accounting should be related to organizational problem areas. This includes:
\begin{itemize}
\item[1.] Relating the structure of the firm to its goals.
\item[2.] Installing and maintaining an effective communication and reporting system.
\item[3.] Measuring existing resource uses, discovering exceptional performance, and identifying casual factors of such exceptions.
\end{itemize}
\item[C.] Management accounting should be related to the management control function. This includes:
\begin{itemize}
\item[1.] Determining economic characteristics of appropriate performance areas which are significant in terms of overall goals.
\item[2.] Aiding to motivate desirable individual performances through a realistic communication of performance information in relation to goals.
\item[3.] Highlighting performance measures indicating goal incongruity within identifiable performance and responsibility areas.
\end{itemize}
\item[D.] Management accounting should be related to operating systems management, by function, product, project, or other segmentation of operations. This involves:
\begin{itemize}
\item[1.] Measurement of relevant cost inputs and/or revenue or statistical measures of outputs.
\item[2.] Communication of appropriate data, of essentially economic character, to critical personnel on a timely basis."
\end{itemize}

It may be appropriate to examine the views of the eminent author, Robert N. Anthony, regarding the content of management accounting. Anthony sees management accounting being structured to consist of three courses, namely, cost accounting in the conventional sense of cost finding, management control and analysis for decision making.\textsuperscript{26) Management accounting courses will have to integrate relevant concepts from related disciplines such as quantitative and behavioural topics. A knowledge of management information systems is important for the future accountant.}

13.7 Auditing in the Education of the Future Accountant

It is necessary to define the objectives of auditing education at a university. There can be no doubt that the student registering for an auditing course is interested in a professional auditing career.\textsuperscript{27) The question that should be answered by auditing academics is to what extent they are capable of imparting auditing knowledge. Should this be restricted to a conceptual understanding of auditing, namely the how and why, or should the auditing education be very technical as the conventional auditing courses have been in the past\textsuperscript{28)} Of late, there have been many requests from eminent authors that accounting and auditing academics should realise that students are interested in education that can be utilised in a practical manner in the outside world.\textsuperscript{29) Professionalisation of the accounting curriculum has also led to discussions of the possibility of the formation of schools


\textsuperscript{27) This is so in most cases except where universities have a mandatory course in a B.Com.: Accounting Programme.}


\textsuperscript{29) Mautz, Robert K., "The Over-Intellectualization of Accounting Education", in Accounting Education: Problems and Prospects, American Accounting Association, Sarasota, 1974.}
of accounting. It is important to recognise the responsibility of the firm, where, it may be stated, the very technical aspects of auditing should be taught. The conceptual and semi-technical aspects should be taught by the academics. This delineation may be more difficult to apply in practice. The report of the Committee on Auditing of the American Accounting Association, in which certain principles are outlined, states that the use of case studies or simulations has proved to be ineffective, because the experiences taught or described are not the ones that the students will put in practice. It acknowledges, on the other hand, that concepts are sterile, when presented without the benefit of examples drawn from experience. It states further that technical knowledge should be taught by those who have the daily responsibility for making operational decisions and solving practical problems. Another statement is that a conceptual knowledge should include those matters which tend to transcend time and application to omitted circumstances. It is averred that because it is imperative that the auditing lecturer have contact with the profession, he must work for a continuous minimum period of three months every two years to make such contact fruitful.

In defining an outline for auditing education in South Africa, it is necessary to recognise the dichotomy of interests between the large firm and the medium-sized/smaller firms. The former prefer a conceptually-oriented approach to the teaching of auditing, believing that they can impart the practical and technical aspects of auditing more effectively than their academic colleagues. A technique-oriented approach is preferred by the medium and smaller-sized firms. It is


32) Ibid., p.159.

33) Loc. Cit.

34) Loc. Cit.

suggested that teaching technical aspects, which simply require the regurgitation of facts which can be read up in a text book, is an exercise in futility, wasting precious time. The question that follows is whether case studies should be used at university to teach certain aspects of auditing. The Beamer Report states in this regard:

"We believe that there is no way to successfully simulate an audit engagement in the classroom and long detailed practice sets traditionally take more scarce time from an already crowded curriculum than is warranted with the result generally achieved."36)

John H. Zeigler, in a study on auditing in the United States of America, found that 46% of the academics interviewed, utilised a practice case or a simulated audit, and many, not requiring such a case, would have used it if they had had the time. It must be realised that in many curricula in the United States of America, auditing is a one-semester course.37) It is submitted that case studies could be utilised very fruitfully in an auditing class. In South Africa the time constraint is not as pressing as it is in the United States of America. Many large firms are always willing to provide case-study material.

The future auditor will need to have an understanding of the necessity of internal control, which will become even more important with increased utilisation of computers. It is further submitted that the future auditor will need to be familiar with statistical sampling and the applications of computerised accounting information. As the number of computer installations will escalate dramatically in the next decade to fifteen years, the auditor must not fear computers. It is essential that ethics and rules of professional conduct be taught at the university level. In outlining the ethics it is imperative that the question of the independence of the auditor be stressed, as it is one of the cornerstones of the profession. Other aspects that require emphasis are the importance of working papers and procedures, the verification of assets and liabilities, the legal responsibilities of auditors, the importance of the audit reports and the implications of qualifications of such reports.


37) Zeigler, John H., Op...
In an empirical study, two academics in the United States of America interviewed practitioners in Texas to determine the relevance of the various aspects in the auditing curriculum. It is interesting to observe that the theory of auditing was ranked as the most important subject area.

It is submitted that in the past, company law has been emphasised too much in South African presentations of auditing at universities. It is realised that legal relationships are very important but the auditor on encountering a complex problem will refer it to a legal expert.

It is necessary to realise that operational auditing or management effectiveness audits will be of much greater importance in the future and greater emphasis must be placed on this aspect. It is submitted that it is very important to teach operational auditing at the correct time. Pre-requisite knowledge is essential. It is suggested that the student should have had exposure to various aspects of management and finance before being exposed to


The rankings of this survey (p.71.) by Robertson and Smith showed the following:

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Theory of Auditing (Ethics, generally accepted auditing standards, basic concepts, processes of judgement formation based on evidence).</td>
</tr>
<tr>
<td>2.</td>
<td>Audit Reports.</td>
</tr>
<tr>
<td>4.</td>
<td>Legal Relationships.</td>
</tr>
<tr>
<td>5.</td>
<td>Internal Control.</td>
</tr>
<tr>
<td>6.</td>
<td>Auditing Relationships (Between internal auditing, firms of accounting, significance of the attest function).</td>
</tr>
<tr>
<td>7.</td>
<td>Electronic Data Processing.</td>
</tr>
<tr>
<td>8.</td>
<td>Sampling in Auditing.</td>
</tr>
<tr>
<td>10.</td>
<td>Human Relations in Auditing (Client relations, leadership, motivation, partner-staff relations).</td>
</tr>
</tbody>
</table>

For ranking of importance of various topics to Chartered Accountants in South Africa see Annexure D.
operational auditing. The following subjects, given by Robert L. Grinaker as pre-requisites for operational auditing, cover a very wide field: Communication, behavioural sciences, economics, computers, mathematics and statistics, social environment of business, business law, production systems, marketing, finance, organisation, group and individual behaviour, quantitative applications in business, written communication and business policy.\textsuperscript{39)} It will be observed that the pre-requisite knowledge is of great importance.

Contact with the practical aspects of auditing is important. It is suggested elsewhere that as the ultimate goal of the profession within the next decade must be graduate entry, it will be important for the students to make contact with the practical aspects. It has been suggested that teaching practices be utilised.\textsuperscript{40)} Robert L. Grinaker does not clarify this proposal, but it is suggested that in practice this would be difficult to implement. It is suggested that students who study on a full-time basis would benefit from vacation employment and this is to be encouraged. As an experiment, an auditing class was given an assignment to do the actual audit of an association of students at an American university, and it was found that, because of this contact, many students, who had not been interested in public accounting chose it as a career, and all the students became more motivated and interested.\textsuperscript{41)}

To sum up, the future accountant must be exposed to the ethics and rules of professional conduct, the reasons for the importance of attested financial statements, the importance of internal control, the verification of assets and liabilities, the interpretation of financial statements, the quantitative applications in auditing, statistical sampling, regression analysis \textit{et.al.} and an understanding of the audit implications of computer installations. It is also important to bear in mind that as operational auditing will assume much greater importance in the future the curriculum must provide for this. There should be less emphasis on law, but the legal

\textsuperscript{39)} Grinaker, Robert L., \textit{Ibid.}, pp.140/141.  
\textsuperscript{40)} \textit{Ibid.}, p.143.  
responsibilities of auditors must be stressed. It is also important to bear in mind that a de-emphasis of techniques is necessary, with a happy medium between conceptual and technique-oriented approaches being maintained. The techniques as such could be taught during the practical-experience period.

13.8 Behavioural Science in the Education of the Future Accountant

Accountants must realise that people are involved in the management process, and are motivated by information flowing from the accounting system. Many complex relationships can arise from the interplay between the accounting process and the people not only involved in it, but also motivated by it. A knowledge of human behaviour is thus necessary. It is suggested that, as far as possible, the behavioural sciences be incorporated into the existing accountancy curricula. Reservations have been expressed about simply tagging on courses in philosophy or psychology, if they have not been designed specifically for accounting students.

13.9 Quantitative Techniques in the Education of the Future Accountant

It is apparent from developments overseas that greater emphasis is being placed on the mathematical ability of accountants. It is stated that with future developments these mathematical trends and capabilities will play a great role in the future chartered accountant’s work. This is one viewpoint but another viewpoint is that many aspects of the mathematical syllabi have been included without real consideration of the issues involved. None other than the eminent authority, R.J. Chambers, has submitted that many aspects have been included without considering whether it is applicable in the accounting environment or not. Chambers states in this regard:

"The case for greater mathematical sophistication on the part of the general body of accountants can hardly be said to be established when it rests only on beliefs and an infection of enthusiasm form the few. If there is a case, it should surely rest on the common body of problems which the performance of the accounting function requires to be resolved." 42

These comments of Chambers were prompted by Roy and MacNeill's preference for a detailed and in-depth body of knowledge of statistics for the future accountant and they state in this regard:

"While we deny neither the possibility of our own bias, nor even the possibility of preconception nor the pertenence of these collective opinions to public accounting today, we believe that tomorrow's CPAs will require something more than the elements of mathematics, statistics and probability and shall so recommend ..." 43)

It has been stated that not all future chartered accountants will require to have an in-depth knowledge of mathematical and statistical techniques.44) There are many accountants who can have useful working lives without mathematical techniques. On the other hand, there can be no doubt that an in-depth knowledge of mathematics and statistics can be of assistance in the fields of management accounting, and accounting and auditing of large corporations. It is therefore recommended that the future accountant understand the mathematical concepts and those applications that can usefully be employed in the business environment. For those chartered accountants who have an above average-mathematical ability, it is suggested that the University of Waterloo approach be adopted, which is that certain universities design their degree courses to allow for options in mathematics and statistics. There can be no doubt that there is much room for chartered accountants with an above average expertise in mathematics and statistics.

13.10 Management and Related Fields in the Education of the Future Accountant

It is submitted that, as the accounting function is the summation of many complex business transactions, it is necessary for the future accountant to have an understanding of the management and operation of companies. It is

44) See Annexure B.21 for statistics with reference to use of modern mathematical techniques by chartered accountants not in public practice.
necessary for the accountant to be exposed to problems facing manufacturing concerns in its formulation of policy. It is also necessary for the accountant to have a broad over-view of marketing, merchandising, micro economics, the purchasing function, personnel relations, business finance and corporation strategy. It is not necessary for the student to be exposed to a variety of courses similar to those of M.B.A. programmes, but it is submitted that the future chartered accountant could be exposed to at least two or three courses in aspects of management. This exposure should ensure the necessary understanding of the business environment and its implications for the accountant. Implications of behavioural sciences in the organisational structure of businesses could also play a predominant role.

13.11 Timing of Courses and a Suggested Curriculum

The course content is important in the education of the future accountant, but the timing of the courses must not be overlooked. The quality of education in the advanced subjects will depend on the knowledge acquired in prior courses. Operational auditing, for example, can only be taught after the student has had exposure to the core requirements of a business curriculum. The matter of timing is important and is stressed in literature on accountancy education.


46) DeCoster, Don T., "The Advanced Managerial Accounting Curriculum—Interaction with other Disciplines: Quantitative, Behavioral, the Business Administration Core, A Critique", Ibid., pp. 100/101. DeCoster sees the following prerequisites for managerial accounting (semester hours indicated in brackets):

Algebra and Calculus (6 to 9)
Statistics and Probability (including regression & correlation) (3 to 6)
Computers and Information Systems (Basic or Fortran Language and machine familiarity) (3)
A specific behavioral science (probably sociology or psychology) (6 to 9)
Economics, both macro and micro (6)
Social Environment and Law (6)
Elementary Accounting (both into to financial and to management) (6)
In suggesting a curriculum for the future education of the chartered accountant, it must be borne in mind that diversity of approach in accountancy education is very desirable. It is suggested that the ideal situation would be a school of accounting within a university. Lecturers for all subjects would be employed in the school. A co-operative or sandwich arrangement with the student attending university for six months of the year, followed by five months with a firm of accountants, is desirable. The course is intended to be intensive and the duration is three years' full-time study and two years' part-time study. The practical-experience requirement for such graduates should only be two years.

The suggested curriculum is:

YEAR 1: Communication Studies I (½ course - first quarter)
Electronic Data Processing I
Economics I
Mathematics and Statistics I
Mercantile Law I
Accounting IA (½ course - 2nd quarter) - (overview of course including an introduction to auditing)
Elective.

YEAR 2: Accounting IB (½ course - first quarter)
Aspects of Management I
Economics II
Quantitative Techniques in Business (½ course - first quarter)
Accounting IC (including introduction to management accounting) - (½ course - 2nd quarter)
Electronic Data Processing II (½ course - 2nd quarter)
Elective.

YEAR 3: Accounting II
Aspects of Management II
Mercantile Law II (including Company Law)
Taxation I

First degree awarded after three years.
YEAR 4 : Advanced Management Accounting
(PART-TIME) Auditing I (½ course - first semester)
                       Business Policy
                       Financial Management (½ course - 2nd semester)

YEAR 5 : Accounting III
(PART-TIME) Auditing II
                       Taxation and Estate Planning

It is believed that the student should be exposed to computers in the first year of study to overcome any fear of computers. Thereafter it is to be integrated into other courses. The ability to communicate effectively is essential for the future chartered accountant. A knowledge of human behaviour together with communication would be an advantage to the newly qualified accountant.

Aspects of Management will include coverage of Finance, Marketing, Organisational Behaviour, Production and Personnel Management.

13.12 Conclusion

It is recommended that a common body of knowledge be given in broad outline, leaving the details to university academics. Changes to the common body of knowledge should be effected more expeditiously in future. It is recommended that any amendments to the common body of knowledge gazetted prior to the 30th day of June each year, may be included in the final qualifying examination of the next year.
CHAPTER 14

QUALIFYING EXAMINATIONS OF PROFESSIONAL INSTITUTES

14.1 Rationale for a Qualifying Examination

The question is often posed why certain professions, such as medicine, engineering, architecture and law (advocates), allow the universities to set their examinations whereas other professions insist on setting their own examination to determine the entrants to the profession. There are various definitions of a profession, and one of the criteria postulated by Schein reads:

"Professionals form professional associations which define criteria of admission, educational standards, licencing or other formal entry examinations, career lines within the profession, and areas of jurisdiction for the profession. ..."

In terms of this criterion a profession does have the right to set its own examination, but the question is why some professions rely on universities and others do not. An analogy is always drawn with the medical profession. It has been maintained that if universities are good enough to decide who will become doctors and thus be responsible for public health, then surely universities can also decide who will become the future accountants and auditors.2) An important aspect in this regard is one of attitude. In medical schools, it is found that the lecturers and professors may be experts in their particular fields, and the hospitals where they lecture are also the operating hospitals used by these specialists. In other words the specialist in the particular field also lectures to the future doctors. Top members of the profession therefore have direct contact with the student in the operating and medical environment. The attitudes of accounting academics differ quite substantially from those of the accounting practitioners. There may be a difference of opinion between the academics and the


practitioners as to what should be included in the academic preparation for the accounting profession.\(^3\) If the views of the practitioner are adhered to, the course may be weighted with too many professionally oriented subjects, which many academics will no doubt regard as being unsuitable for degree purposes. Carrington observes that academics must realise the importance of practical experience, and practitioners must realise that many techniques that they expect universities to teach are not appropriate in the university environment.\(^4\)

Another factor, which is seen as contributing to the attitude that the qualifying examination may be necessary in the accounting profession, is that of time. It is maintained that the period for formal accountancy education in certain countries is too short compared with that of other professions. The available time does not allow for simulation of the real world in accounting laboratories. It is further averred that universities lack the necessary facilities because only in small groups can professional knowledge be imparted. It has been stated that if more time were available for academic courses at university, and if the necessary facilities were available, less formal practical experience would be required and the final qualifying examination might not be necessary.\(^5\)

It is suggested that another reason for the accountancy profession preferring to set its own examinations is that it has to bear in mind the legal liability situation of its members. By setting its own examination it may ensure not only a uniform standard but also an assurance that incompetent candidates will not be successful.

14.2 Advantages and Disadvantages of a Uniform Qualifying Examination

What are the advantages of an examination set by the accounting institutes? These may be detailed as follows: Uniformity of standards for the country on a national basis as well as minimum standards for competence of individuals are set; the

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4) *Loc. Cit.*

5) *Loc. Cit.*
profession does not have the responsibility of evaluating the educational programmes at universities. It has been stated that another advantage of a uniform examination is the constructive influence that it could have on educational programmes.\(^6\) It is submitted that this advantage is a greater disadvantage because it could have a detrimental effect on accounting programmes at universities. Another advantage cited is that as the C.A. designation is recognised by law, the layman thus has respect for the qualification.\(^7\) It has also been stated that because the examinations are normally difficult a fraternal feeling, or an *esprit de corps* is created.

The disadvantage could be, as stated above, that it could have a substantially undesirable effect on the teaching of accountancy at universities and it is suggested that this has been the case in South Africa. It has been stated that universities have to teach obsolete material because this is needed for the examinations. Also candidates have to memorise material instead of being able to use reference books. A disadvantage of a uniform examination is that because of the importance attached to it by students, it becomes all-important and is regarded as the requirement instead of just simply being a requirement for entry to a profession.\(^8\) This influences the academics who have a substantial responsibility educating the students. It has also been stated that the people setting the examinations do not have the ability to do so as they have generally not taught the students. This argument can be countered by the fact that it depends on the type of examination. If the examination is professionally oriented, this criticism does not apply. However, certain academics maintain even if an examination is more professionally oriented, students will be able to cope, but not all academics share this view.

Complaints often levelled at accounting institutes are that the examinations take into account the requirements of the practitioner only, and overlook the requirements of

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the other fields of interest in accounting. It has been stated that as so many chartered accountants are not in public practice, the examinations should cater for all aspects of the profession. It is submitted that many non-practising accountants take up the profession because of the status and esteem in which the qualification is held in the commercial world. The chartered accountancy designation is recognised by law, which gives it added status. 9) It is recognised by law because the qualification must give the assurance that people expressing opinions on the fairness of financial information have the necessary competence. In view of this, it is submitted that the examination should be more professionally oriented, although it should not overlook certain aspects of data processing and management accounting as these are of great importance to the practitioner.

Another contentious issue is what type of questions should be set for the qualifying examinations. Solomons refers to a test of professional competence and advocates the use of case studies, involving a number of disciplines and requiring analysis and report. 10) Solomons does not go into the details about the context, the setting and the marking of the paper. He does see the advantage of monitoring examination standards set by universities and other polytechnics without directly interfering with them. 11)

14.3 Review of Qualifying Examinations around the World

Before deciding on the nature of the examination and of the questions, a brief summary of some of the approaches of accounting institutes around the world may be beneficial. In Australia, the Institute of Chartered Accountants does not regard the examination as a hurdle as is indicated by the examination statistics. Although the statistics indicate a high pass rate, it must be remembered that the performance in


11) Loc. Cit.
the examination is not the only criterion used to determine whether a candidate is successful or not. The evaluation process is dependent on mandatory attendance at all sessions of the Professional Year, and the completion of assignments during the Professional Year. The participation of the candidate in class discussions is also noted and considered in the final evaluation. Thus the evaluation takes into account different aspects, namely those mentioned above as well as the performance in the examination. The examination, which consists of two three-hour papers, revolves mainly around the reporting function, and this is illustrated by the fact that most of the examinations cover fairness of presentation of financial statements. The examination is normally written after the completion of the Professional Year.

The Canadian approach to the final qualifying examination is indeed very thought-provoking and interesting. As the object is to retain an impeccable image, the examination is intentionally difficult. The examination consists of four papers of approximately four hours each. Various types of questions are set, such as comprehensive (case study), multiple-subject, single-subject as well as the latest developments reflected in current literature. Single-subject questions are being de-emphasised and greater emphasis is being placed on the multiple-subject and comprehensive questions. Use of multiple-subject questions results in questions being longer and the case study question is a three and a half to four hour paper. The case study question has caused its fair share of controversy and the Canadian Institute is at present reviewing the whole comprehensive case study question. A protagonist of the case study approach to examinations, L.S. Rosen, examines the following criticisms levelled at the comprehensive question:
(a) Comprehensive questions cannot be marked objectively
(b) Comprehensives do not test the ability to practise
(c) Comprehensives cost too much to mark
(d) Comprehensive questions are classroom tools and not examination devices. 12)

Rosen counters the argument about questions that cannot be marked objectively by stating that a marking guide can be devised, and he maintains that the greatest so-called subjectivity occurs in the wording of questions and the marking guide. This applies to single-subject questions as well. 13) Regarding the criticism that comprehensives do not test the ability to practise, Rosen, finding the comment puzzling and weak, states that these questions can test both the breadth and depth of the candidates knowledge. He further states that the candidate must recognise problems and analyse them and these questions involve accounting, auditing and taxation issues. He states that as the Education Committee becomes more proficient in setting these questions, they will test the overall knowledge of the candidate. 14) It may be stated that many universities throughout the world have been using case study questions quite successfully. On the other hand people do argue that it is not a suitable teaching and examination device. Rosen counters

13) Ibid., p.58.
14) Loc. Cit.
the argument about the cost of comprehensives, by stating that if costs and benefits are compared the long-term benefits will justify the increase in costs. During a visit to Canada it was noted that trainee accountants earn relatively high salaries. Considering that everything is relative, and comparing the total cost of the examination to salaries, the cost, in comparison with costs and salaries earned a decade or so ago, is not as high as it is made out to be.

With regard to the criticism that comprehensive questions are classroom tools and not examination devices, Rosen states:

"Probably the proponents of this view have not taught many CA candidates over the years. It is time to be very frank. Several teaching colleagues have remarked that CA students are tougher to handle than most other groups. Why might this be so? Two common speculations are that their daily work experience at a junior level has taught them (a) to look for the immediate practical solution, rather than one useful over the long term; and (b) to keep their mouths closed when uncertain of an answer. These behaviour patterns are then carried into the classroom, with the result that: 'teach me only what I need to know to pass the final examination,' with no effort at active participation in the classroom. But instructors need feedback to operate classes effectively!

Unfortunately it appears that they need to use the spectre of the Final Examination content to teach students the accounting theory of tomorrow (and even some of today's). For years the accounting theory course pitched at CA students was a particularly harrowing experience for instructors. For an explanation, simply look at any accounting theory questions, appearing on past Uniform Finals - if you can find any. Now the presence of current literature questions has improved the situation. What was considered far-out theory in the early 1960's is now finding its way into both U.S.A. and Canadian professional pronouncements. Examining and encouraging studies on possible future practice helps to discourage rapid
The controversy surrounding the comprehensive questions is illustrated in articles appearing in the CA Magazine. In a recent article, J. Desmondffolliot outlines the benefits of the comprehensive question. Having had substantial experience in marking a few thousand answers to the comprehensive type question, he states that the question does test the competence of the student in the following areas: ability to understand inter-relationships; ability to establish priorities; ability to apply professional judgement under pressure; ability to organise large quantities of data; ability to write a logical and coherent report; problem solving skills and accounting skills. Desmondffolliot maintains that the opposition to the comprehensive question is basically because students have not been prepared for these examinations, and academics will have to change their teaching styles to cope with this type of question.

The marking of the comprehensive question has caused its fair share of problems, as some answers have had to be marked up to five times to obtain some correlation between the marks of the various examiners. It is believed that it is possibly very difficult for examiners to mark within a four percent range. It is believed the questions could be marked in certain categories such as 'very good', 'good', 'marginal' and 'fail'. Once the papers have been placed into various categories a mark can then be awarded. It is obvious that there can be no single most suitable answer for a comprehensive, and over-marking techniques are used in various areas of the answer to the question. However the over-marking in each area must be limited because students could then attain marks on peripheral issues instead of the key issues.

In a recent letter to the CA Magazine, a successful candidate in the 1974 examination stated that he feels the comprehensive question is essential for evaluating a candidate's ability.

15) Ibid., pp.58/59.
16) Desmondffolliot, J., "Time to face up to the Comprehensive Disaster", CA Magazine, November 1975, p.57.
17) Ibid., p.58.
and a successful pass in this question be made mandatory for passing the finals. In favouring the comprehensive question he states that it does give the candidate the opportunity to show genuine thought instead of mechanical or memory ability. He further feels that the comprehensive question should account for approximately one half of the total marks. He does state a reason for the opposition to the question is possibly that during the two-year exposure to practical experience in large firms, clerks do not have sufficient experience to cope with the question. He further states that a clerk in a smaller firm would have had wider experience and thus possibly be better equipped to write the examination. He concludes his letter with:

"Let's increase the students exposure, or go back to a three year term of service so that candidates will have this necessary background. This will be far more beneficial than limiting or eliminating the Comprehensive Question."

Bearing in mind that the writer of the letter may be prejudiced by his own success in the examination, the comments made are of interest.

An examination of the contents of the Uniform Final Examination of the Canadian Institute reveals that there is an integration of the various subjects in all the papers. It will not be found that one paper is predominantly an auditing paper. The comprehensives have revolved mainly around accounting, finance and management accounting issues, but there is no reason why the case study question could not be devoted more to auditing questions. Some of the multiple-subject questions are on auditing issues. It is believed that integration of the various topics is commendable because auditing involves the expression of opinions on all subjects affecting the accountant. Aspects of professional practice

19) Loc. Cit.
20) Loc. Cit.
cannot simply be compartmentalised according to subject-titles. In practice an overall knowledge of accountancy is a pre-requisite — this should surely manifest itself in the final qualifying examinations of accountancy institutes.

The literature questions are interesting and a choice is given. Multiple-choice questions are used to a very limited extent accounting for only approximately 4% of the total marks of the 1974 paper. Much criticism has been levelled at the multiple-choice (objective) questions because of the problems in the validation process. This process is facilitated by the use of computers which will indicate whether the question has possibly been ambiguously interpreted. In the United States of America where this question is used to a much greater extent, if the computer tabulations prove that a question may be suspect because responses to another alternative are high, the second alternative may also be accepted. One major advantage of the multiple-choice question is that it can test knowledge of concepts in substantial breadth.

An examination of the *Wirtschaftsprüfer* examinations in Germany reveals that the emphasis is on the ability of the candidate to apply his knowledge. The examination consists of two parts, namely written and oral, and the candidate is also expected to write a thesis. The object of the thesis is to test the ability of a candidate to do research on a specific subject. The candidate is given a choice of two subjects and he has to complete the thesis within eight weeks. The thesis is expected to be between 60 and 70 type written pages. The written examinations are in auditing and economics and company law and taxation. A half an hour before the oral examination the candidate is given three topics relating to professional practice and he must speak on one of these. The oral examination may not exceed two hours per candidate. Candidates may be referred in unsatisfactory subjects. Only three outright failures are allowed. The German approach is interesting and is facilitated by the fact that not many
candidates enter for the examination. In the Anglo-Saxon countries oral examinations are not used, with the exception of the Scottish Institute where a student may be given an oral examination after the assessment of his supplementary examinations. The oral examination does have the merit of being able to test a candidate's ability to express himself, and certain doubtful points in the answer presented by the candidate can be cleared up. A problem with the oral examination is the maintenance of consistent standards among centres. In South Africa more than 800 candidates write annually and how does one give oral examinations for such a large number of candidates spread over the whole country? A consideration may be to give borderline cases oral examinations.

The performance of students in the comprehensive question will automatically improve when the academics have more experience in teaching and the students more exposure to this type of question. The comprehensive question in accountancy examinations will no doubt lead to the publication of books in this field and one such book has already been published.21) There can be no doubt that academics will teach to the form of the examination eventually, and publication of case study text books designed specifically for accountancy students will facilitate this process.

Diversity once again is symptomatic of the approaches of the various institutes throughout the world. A review of the examinations set by the Institute of Chartered Accountants of England and Wales, in terms of their new regulations, reveals that the professional examination consists of five three-hour papers in financial accounting II, auditing, taxation II, management accounting and elements of financial decisions. Their approach to the auditing paper utilises short questions. The paper is divided into three parts with Part A consisting of six compulsory questions. Part B and Part C consist of two questions each and one question in each part must be answered. The philosophy of the English Institute to its

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examinations is described as:

"The examinations must therefore be regarded primarily as tests of whether candidates have prepared themselves adequately in the principles of their work, have developed certain minimum skills and have acquired a sufficient knowledge of such facts as chartered accountants should know. However, a student as he progresses through his training period should increasingly build up a mode of thinking, and a method of approaching problems, characteristic of a chartered accountant and to this extent questions set in the later papers can be more problem-oriented." 22)

This philosophy is based on the premise that as the practical experience of students and of chartered accountants varies so widely, it would be impossible to set a fair, final examination based on practical experience. This is valid and stresses the importance of the profession setting high standards for practical experience, and ensuring that the quality of the practical experience can be controlled. Topical contentious issues appear in the examination papers of the Institute of Chartered Accountants in England and Wales. This is illustrated by the fact that the July 1975 Financial Accounting II paper had a question on constant purchasing power adjusted financial statements. This is to be commended.

Professional examinations are constantly being subjected to criticism because of the low pass rates, and it is appropriate to review the pass rates of a few of the major accounting institutes. Although the pass rates of the Australian Institute are high these must be seen in relation to their evaluation process which includes performance in the Professional Year. The statistics of the Canadian Institute reflect an improvement during the last three years with 50,1% of the candidates being successful in 1973, and 55,6% in 1975. This can also be attributed to the fact that students have had more exposure to the controversial comprehensive questions. The pass percentages of the Institute of Chartered Accountants in England and Wales are consistently low. The statistics in Table Number 31 show that the pass rate in Scotland is fairly high, but this is after having taken the results of the

supplementary examinations into account. There can be no doubt that many students pass the supplementary examinations and thus qualify as chartered accountants.

Table No.: 31.

Schedule Reflecting Extracts from Examination Statistics of Certain Accountancy Institutes 23)

(Percentages indicate successful candidates)

<table>
<thead>
<tr>
<th></th>
<th>1972</th>
<th>1973</th>
<th>1974/5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Australia</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>76%</td>
<td>84%</td>
<td>86,7%</td>
</tr>
<tr>
<td><strong>Canada</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>50,1%</td>
<td>53,7%</td>
<td>55,6%</td>
</tr>
<tr>
<td><strong>England</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Part II</td>
<td>June</td>
<td>1972</td>
<td>43,01%</td>
</tr>
<tr>
<td></td>
<td>May</td>
<td>1973</td>
<td>42,37%</td>
</tr>
<tr>
<td></td>
<td>November</td>
<td>1973</td>
<td>43,71%</td>
</tr>
<tr>
<td></td>
<td>May</td>
<td>1974</td>
<td>44,32%</td>
</tr>
<tr>
<td></td>
<td>November</td>
<td>1974</td>
<td>45,42%</td>
</tr>
<tr>
<td></td>
<td>May</td>
<td>1975</td>
<td>28,86%</td>
</tr>
<tr>
<td>Professional Examination II</td>
<td></td>
<td>1975</td>
<td>44,73%</td>
</tr>
<tr>
<td></td>
<td>July</td>
<td>1975</td>
<td>44,73%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1974</th>
<th>1975</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scotland</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part I</td>
<td>64,0%</td>
<td>76,7%</td>
</tr>
<tr>
<td>Part II</td>
<td>71,4%</td>
<td>76,1%</td>
</tr>
</tbody>
</table>

14.4 The Nature of the Final Qualifying Examination

The aim of the final qualifying examination of an accountancy board must be clearly defined taking into account the great importance of public interest. The examination must assure that those qualifying are competent to serve the public interests. It is important that no person, who could be an

23) These statistics have been furnished by the various institutes
24) These statistics take the results of the referred students into account. The percentage appears to be high, but candidates presenting themselves for both examinations, are only counted once.
embarrassment to the profession, be able to pass the examination. It thus follows that a qualifying examination should be designed to test the professional competence of a student in the disciplines of accounting and related fields. The candidate must have adequate technical competence as well as the ability to apply knowledge skillfully and with good judgement. An important aspect is whether the examination should be of a practical nature. It is submitted that this examination should be of a practical nature and not just a retesting of what has been tested at universities. It is important to remember the British philosophy that, because of the lack of control over the quality of practical experience, this may not be possible. It is believed that a case study approach to examinations is desirable together with other forms of questions. The pro's and con's of the comprehensive question have been discussed in detail, and it does have the advantage of assessing whether a candidate can decide what is relevant and what is not. The multiple-choice question could be used to a limited extent, because it can test a wide range of a candidate's knowledge. It is important to remember that to be of any use these questions must be correctly validated. It is also important that candidates bear in mind that they are expected to be educating themselves for life. It is therefore essential that the latest developments be incorporated in a final qualifying examination. If this is not the case, it could be a sad indictment against universities for not succeeding in teaching students how to teach themselves.

Before endeavouring to discuss how a comprehensive question could be set, an analysis of characteristics of a good examination should be made. These have been described as adequate reliability and adequate validity. The former is affected by such matters as the length of the paper, the number and mix of questions, the clarity of questions, the appropriate level of difficulty, the variation from day to day of candidates' individual standards, the objectivity of marking and the variations of marker standards. Validity could be maintained

by ensuring relevance of questions, freedom from ambiguities and representativeness of content.\footnote{26}{Loc. Cit.}

No doubt major objections will be expressed about the introduction of a comprehensive-type question in the South African Qualifying Examination. The criticisms that will be levelled at this type of question will no doubt be similar to those expressed in Canada. One major objection will be that it is difficult to set this type of question. It is submitted that this is not an objection but a challenge. The comprehensive question in Canada has been based mainly on an accounting and financial case study which has also entailed knowledge of taxation and management accounting. It is submitted that the case study could be utilised very effectively for testing a candidate's application of auditing knowledge. It is submitted that it should not be difficult to set such a question. It is envisaged that extracts from working-papers' files could be given to candidates with very brief instructions. The candidate will be placed in the role of the practitoner who is in charge of an audit and who has to review the audit working-papers' files. The working-paper schedules and the information can be drafted in such a manner that there will be a comments column for the candidate to indicate his comments and queries. It is envisaged that there will be errors of principle in tax calculations, possibly errors in principle with regard to stock valuations and this the partner will have to pick up in the normal course of his review. If supporting schedules are required for the calculations, the candidate can do this on a loose sheet of paper and cross-reference the schedule to the working-papers' file and vice versa. It is submitted that if the large firms co-operate, the setting of such a question should not be difficult. The auditors report as drafted by the clerk would have no qualifications, yet the indications in the working-papers' file would be such that there was something materially wrong which the clerk had not detected. This would test a candidate's knowledge of qualifications of an auditor's report. It is believed that the scope of this type of question is unlimited as it can test all facets of a chartered accountant's work. Principles involving accounting, management accounting, taxation, auditing, and financial principles could be tested in detail, in breadth and in depth.

\footnote{26}{Loc. Cit.}
It is further submitted that the marking of the question should not be too difficult as the comments required on the working-papers' file will be anticipated, and credit will be given to any other valid comments. The candidate should not be expected to regurgitate unnecessary facts. Necessary extracts of tables, rebates and abatements, as well as important extracts from the relevant statutes should be made available to the candidate. In this manner he is being placed in an in-office environment. Other case studies testing the candidate's knowledge of computer systems, finance and accounting (including taxation implications) could also no doubt be devised. It is not intended that shorter questions should be completely eliminated.

Another objection to the comprehensive type question is that a student may be too heavily penalised because of certain errors made in the beginning of a question. This comment is not valid as the guide for markers will take into account other alternatives and an over-marking technique is also used. It may therefore be stated that the future examination for the Public Accountant and Auditor in South Africa must be a difficult one. It is believed that it should consist of three, 4 to 5 hour papers which could utilise comprehensive type questions, multiple-choice questions and multiple-subject questions, and test a candidate's knowledge of the latest developments as reflected in current literature. It is further suggested that the Canadian precedent of just simply numbering papers be accepted and that questions of the various subjects be integrated into any paper. The sub-minimum of any one paper to be forty-five percent and an aggregate of fifty percent be attained to pass the examination. It is imperative that the examination should not retest what has been taught at universities, and if the suggested examination outlined above achieves this aim, then experimentation leading to such an examination should be welcomed.

Another important question is whether the scores attained by candidates should be adjusted. Educationalists maintain that standards of candidates should not vary substantially from year to year, and any marked variation in pass rates must be due to variations in the standards of the examiners.
They maintain that these variances can be corrected by scaling results either upwards or downwards to produce consistency. Examiners of certain professional institutes believe that the standard of candidates does vary from year to year basing this on their experience of the marking of scripts for many years. Educationalists have proved their hypothesis by applying the statistical formulae to the examination results of school leavers, and members of the professional institutes aver that this does not apply to a much smaller number of examination candidates of a professional institute. 27) Members of professional institutes refuse to pass candidates who fail to achieve the expected standards simply to meet arbitrary standards. It may also be stated that a member of a professional institute would not reduce the pass rate to comply with a pre-determined pass rate. If the candidate has succeeded in passing he should not be penalised. 28) It is noteworthy that the results of the largest institutes namely the United States of America and Canada, are adjusted, by taking statistical methods into account, to ensure consistency of standards. It has been stated that if questions are properly validated, statistical adjustments may not be necessary. However, experience in the past has shown that the pass rate has fluctuated quite materially, and the fluctuations could be attributed to various factors such as the accounting content being too high and resulting in high pass marks. Low pass marks have been attributed to unbalanced papers where one could possibly find two exceptionally difficult questions in one paper. It is suggested that the Education Committee of the Public Accountants' and Auditors' Board investigate the possible application of statistical formulae to its examination results.

14.5 Conclusion

Notwithstanding earlier views held, 29) it is suggested that a professional institute of accountants does have the right

27) Ibid., p.281.
28) Loc. Cit.
29) See Footnote 2.
to set a uniform qualifying examination, which should be so designed to test a candidate's professional competence. It is submitted that such an examination must be a difficult examination, which will ensure that the public interest is also taken into account.
CHAPTER 15

REQUIRED CONTINUING EDUCATION

15.1 Introduction

It is generally acknowledged that the growth rate in the body of knowledge will accelerate much more quickly in the near future than has been the case until now. The view has been expressed that the body of knowledge will double every five years. The fact remains that the so called "knowledge explosion" is with us and this presents a great challenge to the accountancy profession.

15.2 Rationale for a Required Continuing Education Programme

The rationale for mandatory or required continuing education is the so called "knowledge explosion" during the twentieth century, and substandard quality of work by practitioners. It is in the public interest that public accountants maintain their competence.

It has been stated that the term, "knowledge explosion", is over-used and that this explosion applies more to physical sciences than the social sciences. The point has been made that with regard to the accountancy profession there has been an explosion of public expectations rather than knowledge.

On the other hand the practising accountant has to contend with developments in inflation accounting, the development of multi-national groups with its associated problems, the continuous changes in taxation and other legislation, the anticipated growth of the use of computers, the greater emphasis and utilisation of statistical and mathematical techniques. Laws and regulations applicable to various industries tend to become more complex with the efflux of time. It cannot be denied that greater technical competence will be


2) Loc. Cit.
required of the practitioner in future.

Another justification for required continuing education is the substandard quality of work done by practitioners. It has been stated that this substandard work is not done wilfully, but is due to ignorance. 3)

Discussions with practising accountants reveal that the review of colleagues' working papers has left much to be desired and it is felt that required continuing education will really help to improve the quality of the work performed by these colleagues. Examples quoted of substandard work reveal that certain colleagues are not up to date with their knowledge. Statements such as: "We did not verify the physical existence of stock" in the auditor's report of private companies cannot be tolerated. The quality of working papers also leaves much to be desired.

Opponents of required continuing education will argue that attendance of courses will not necessarily enhance the competence of practitioners and reduce the number of complaints to the Investigation Committee of the Public Accountants' and Auditors' Board. It may improve the technical knowledge of the practitioner but not necessarily his competence.

This argument may be countered by drawing an analogy with a rugby referee. To be a good referee, you must know the laws of the game, but knowing the laws of the game does not necessarily imply that you will be a good referee. On the other hand if you do not know the laws of the game you cannot be a good referee. Thus for an accountant to be competent, he must know "the laws of the game".

A very strong argument in favour of required continuing education is that of public interest. If public interest is regarded as paramount, which it is believed it should be, the profession must not only endeavour to maintain competence, but also it "should be seen to be maintaining its competence."

The auditor's duty was emphatically stressed in the statement

made by the Minister of Finance when opening the first meeting of the Public Accountants' and Auditors' Board, as far back as 1951:

"To my mind a most important aspect of this legislation is parliament's recognition of the principle that an auditor owes a duty not only to his client but also to the public. For many years auditors have been in doubt as to their responsibility to the public. Parliament has now given a clear and unequivocal answer." 4)

Marvin Stone, a protagonist of required continuing education, has pointed out that the Certified Public Accountant is licensed to protect the public who rely on the former because of his knowledge and independence. 5) He further points out that the practising accountant has a monopoly, (which is also the case in South Africa), and it is reasonable to expect that heavy responsibilities must accompany the granting of such an exclusive licence. 6)

It has been pointed out,

"that the C.A. designation is not comparable to a university degree, which indicates that an individual has met specific levels of knowledge at a particular time. The CA designation is a 'current qualification' signifying membership in a professional group. It indicates - or should indicate - that each member possesses a good awareness of the current technical knowledge by professional colleagues in the course of providing their services." 7)

In other words, the use of the designation Chartered Accountant (S.A.) is not automatic, but requires annual registration with a provincial society, and if one wants to practise as a public accountant and auditor, annual registration with the Public Accountants' and Auditors' Board is required. To be entitled to the use of the Chartered Accountant (S.A.) designation it is reasonable to expect a certain level of technical competence. On the other hand it may be argued

4) Statement AI, of The National Council of Chartered Accountants (S.A.), "Auditing Principles and Standards", April 1964, par.4,p.3.
6) Loc. Cit.
7) Canadian Institute of Chartered Accountants, Special Committee on Required Professional Development - Summary Report, Toronto, August 1975, p.1.
that specialisation is becoming a very important aspect and practitioner's interests in public practice become so narrow that it is unreasonable to expect a chartered accountant to maintain his general technical competence. It may further be observed that it is fallacious to state that all chartered accountants are equally competent.

Public expectations of the accountancy profession are great and it is a truism that these expectations will become greater in the future. Another justification for required continuing education is that the profession is going through a difficult period and is being severely criticised and sued. This may be more applicable to our colleagues overseas, but the possibility cannot be excluded that this situation may occur in South Africa at greater frequencies.

15.3 Arguments Against Required Continuing Education

A visit to the State of California with its successful implementation of required continuing education possibly makes one a protagonist for required continuing education. On the other hand a visit to the State of New York causes second thoughts as to whether continuing education should be made mandatory by legislation.

An examination of the Report of Committee on Mandatory Continuing Education of the New York State Society of Certified Public Accountants details many arguments against continuing education.\(^8\)

The arguments cited are: that the expression, "explosion of knowledge", is a modern day cliche and that it does not apply to the fields of accounting and auditing; that other professions with great responsibilities do not have a mandatory continuing education requirement; that the image of the profession would suffer further because of such a requirement and that it would be degrading; that continuing education will not necessarily imply improved competence; that the requirement for mandatory continuing education is to ensure that a minority within the profession maintain their competence, thus placing

an unfair burden on the majority. It is felt that the professional societies themselves, and not the State Legislature, should prescribe the educational requirement of members. Attendance at classes will not necessarily improve competence as a member could be dreaming instead of concentrating on the lecture. There are not sufficient courses to cater for all members. It is further argued that quality control of courses could be problematical. Further arguments against continuing education are that the cost of the courses is too high and the loss of chargeable time makes it an expensive exercise. It is further contended that a voluntary programme could be just as effective and the market place will determine who is competent and who is incompetent. Study at home, it is contended, could be just as effective. Should the specialist be exposed to courses that will be of no use to him? Should the small practitioner be exposed to courses which have no relevance to his practice?

Opponents of required continuing education argue that a system of practice review would be more effective in improving competence than a required continuing education programme. They further contend that the in-house programmes cannot be recognised, because they are difficult to supervise and have the affect of isolating practitioners with no interchange of ideas between practitioners of different practices.

Many of the law suits in the United States of America are against firms which do have in-house programmes. It is argued that the cause of a law suit is not lack of education, but lack of integrity, ethics or judgement.

Other arguments against required continuing education are that it will result in the creation of two classes of chartered accountants because those not in public practice will be exempt from the requirements; that it is more important to concentrate on the quality of the new entrant to the profession, because if this could be ensured, required continuing education would not be necessary.
No doubt, many arguments could be formulated, but the validity of these and some of those outlined above is suspect. The so-called "explosion of knowledge" is possibly a misnomer, but the body of knowledge expected of the practising accountant has increased substantially during the last decade or two. The fact that another organisation does, or does not, do something cannot be used as a motivation for or against a certain case. An examination of what other professions are doing can be made and endeavour to learn from their experience, but the fact that X profession does not require continuing education as such, cannot be used as justification for the accountancy profession not requiring it. The circumstances within professions differ so substantially that it should be examined on merit.

The argument that the image of the profession would suffer as a result of mandatory continuing education does not hold water. On the contrary, it is believed that the image of the profession would be enhanced in the eyes of the public, because public interest has been taken into account and the profession is being seen to be technically competent.

Some of the objections to required continuing education should be challenges rather than objections. Insufficient courses to cater for the needs of practising chartered accountants and difficulties of quality control are challenges to be met. The quality of courses could be monitored in advance and the market place will no doubt determine the quality of a course.

It must be borne in mind that a profession is only as strong as its weakest member. If the accountancy profession does not make continuing education a requirement of reregistration, it cannot ensure that the weak links maintain their knowledge.

Can the profession afford the "market-place argument" to determine who is competent and who is incompetent? This market-place assessment is an event after the performance of a service and the image of the profession may suffer as a result.

Another argument mentioned against required continuing
education is that people can attend courses and be entirely oblivious of the happenings around them. They could concentrate on many of their problems at the office. This argument could be countered by the fact that a person will try to benefit from his attendance because of the cost factor as well as the loss of chargeable time.

15.4 Required Continuing Education in the United States of America

It may be appropriate to quote the resolution on continuing education passed by the Council of the American Institute of Certified Public Accountants on 12 May 1971:

"Whereas, the explosion of knowledge and the increasing complexity of practice make it essential that certified public accountants continue to develop their competence, and

Whereas, the public interest requires that certified public accountants provide competent service in all areas of their practice, and

Whereas, formal programs of continuing education provide certified public accountants with the opportunity to maintain and improve their competence.

Therefore be it resolved that the Council of the American Institute of Certified Public Accountants urges each of the several states to institute a requirement, by legislation or regulation as may be appropriate, that certified public accountants demonstrate that they are continuing their professional education as a condition precedent to the reregistration renewal of permit to practice, or other validation of a CPA's designation.

Further be it resolved that the National Association of State Boards of Accountancy be asked to consider this resolution with a view to lending its support.

Further be it resolved that in the interest of uniformity the Council urges each of the several states to adopt the guidelines attached to the report of the committee on continuing education."  

The American Institute gives the following guidelines:

i) 120 hours or 15 days of acceptable continuing education must be completed by the applicant in the three-year period prior to reregistration;

ii) a fifty minute lecture equals one hour;

iii) preparation time is not to be taken into account in complying with the three-yearly requirement;

iv) service as a lecturer or discussion leader will be included if it contributes to his professional competence, and provided that repetitious presentations are not taken into account.

The guidelines then indicated that the regulations would become effective three years after adoption, and that the State Boards of Accountancy should have authority to make exceptions for reasons of health, military service, foreign residency and retirement.¹⁰)

The requirements for courses to qualify for credits are that they should be formal programmes of learning which contribute directly to the professional competence of an individual in public practice.¹¹) Formal programmes requiring class attendance will qualify only if an outline is prepared in advance and preserved. The programme lasts at least one hour and must be conducted by a qualified instructor. A record of registration or attendance must be maintained.

The guidelines then detail actual courses which are acceptable if the abovementioned requirements have been met. These courses are: professional development programmes of the American Institute of Certified Public Accountants and state societies; technical sessions at meetings of American Institutes of Certified Public Accountants and state societies; university or college courses for credit and non-credit purposes; formal organised in-firm educational programmes, and programmes of other accounting, industrial and professional organisations.

¹⁰) Loc. Cit.
¹¹) Loc. Cit.
The guidelines also provide for the recognition of formal correspondence or other individual study programmes if evidence is given of satisfactory completion. The credits for these courses are to be determined by the Board of Accountancy. \(^{12}\)

Every three years a report, signed by the applicant and indicating the title and/or description of courses he has attended, the sponsoring organisation, location or courses, dates attended and hours claimed, is to be submitted. \(^{13}\)

15.5 Firm Quality Review Programmes

The American Institute of Certified Public Accountants has a Local Firm Quality Review Program which is regarded as being complementary to the formal continuing education programme, and is designed to enhance the standards of reporting, workpaper presentation, audit performance, and accounting services, by means of a confidential review which highlights deficiencies and weaknesses in the techniques employed by specific firms. \(^{14}\)

The Quality Review Program operates in the following manner: Two qualified practising accountants are selected in consultation and concurrence with the reviewee firm. They are from out of state and care is taken to ensure that they do not practise in the same geographic area as the reviewee. The reviewers spend two days at a firm, spending one and a half days reviewing selected engagements by the firm. It is endeavoured to determine whether the reports on individual audited and unaudited engagements, together with supporting working papers and documentation, have been prepared in a technically competent manner. An important aspect of the review programme is determining whether, in the opinion of the reviewers, the financial statements are

\(^{12}\) Loc. Cit.

\(^{13}\) Loc. Cit.

\(^{14}\) Ibid., p.9.
compiled in conformity with generally accepted accounting principles, and that fairness of presentation has been achieved.

The reviewers are assisted by a kit of materials which includes a forty-five page review checklist covering all phases of engagements selected for review.15)

During the afternoon of the second day the reviewers comment orally to the partners of the firm on their findings. Members of staff may be invited to sit in on the discussions. Any weaknesses are detailed on a checklist, which is left with the reviewee. All programme materials remain on the reviewee firm's premises. This ensures confidentiality and enables the reviewee to refer to them in future so as to rectify weaknesses observed by the reviewer. It is also recommended that a partner of the reviewed firm participate in the review of another firm. This also has educational value as the partner is also exposed to different approaches.

The Institute has a bank of reviewers, numbering over two hundred Certified Public Accountants, to assist with reviews. National firms' audit partners and staff members involved with firm quality review programmes also volunteer to be members of the review bank.16) The benefits of the Local Firm Quality Review Program are briefly detailed as follows: Weaknesses are diagnosed and pointed out to the firm; technical performance is improved as a result of advice offered by experts with extensive experience in the profession; a structured continuing professional education programme can be designed for a firm on request, depending on the deficiencies detected during the review. An added benefit accrues if a partner of the reviewed firm assists with future review programmes.17)

Opponents of required continuing education have maintained that a quality review programme would be more effective in

15) Bruschi, William C., "The Institute's Peer Review Programs", a paper delivered at The American Accounting Convention (copy of paper furnished by the American Institute of Certified Public Accountants) pp.1/2.

16) Ibid., p.2.

17) Ibid., p.3.
improving standards than a required continuing education programme.\textsuperscript{18)}

The extent to which the American Institute's quality review programme has been successful is analysed by W.W. Ecton, of the University of Kentucky.\textsuperscript{19)} His initial reaction on ascertaining that in 1974 only 125 firms had participated in the programme was one of disappointment, but after completing his investigation and determining how the system operates, he finds the response impressive indeed.\textsuperscript{20)} Confidentiality by the American Institute of Certified Public Accountants ensures the confidence of the participants.

In his investigation Ecton tried to determine why participants used the quality review programme, by asking: "What prompted you to participate in the program?"\textsuperscript{21)} The answers revealed the need for confirmation that what the firm thought it was doing, was a professional and competent job.\textsuperscript{22)} Firms that experienced rapid growth through increased clientele, wanted to satisfy themselves that their personnel was coping with the situation. Another example he quotes reflects concern whether a firm was complying with the requirements of the Securities and Exchange Commission.\textsuperscript{23)} Another firm was perturbed by the high cost of liability insurance, which is passed on to the clients and he wanted to give his clients better service. After his firm had been reviewed he was satisfied that he was giving them good service.\textsuperscript{24)} The general reaction of all participants was satisfaction with the results of the programme and its cost was regarded as of minor importance.\textsuperscript{25)}

The reviewers have generally experienced the same problems as the reviewee firms and the former are only too pleased to pass

\begin{itemize}
\item \textsuperscript{18)} Report of the Committee on Mandatory Continuing Education, Op. Cit., p.11.
\item \textsuperscript{20)} Ibid., p.106.
\item \textsuperscript{21)} Ibid., p.107.
\item \textsuperscript{22)} Loc. Cit.
\item \textsuperscript{23)} Loc. Cit.
\item \textsuperscript{24)} Loc. Cit.
\item \textsuperscript{25)} Loc. Cit.
\end{itemize}
on the benefits of their own experience. The benefits of participating in the local review programme are summarised by Ecton as: the benefit of the general knowledge of the reviewers; the knowledge of their own clients that the reviewers pass on to the reviewees; the opportunity offered to the reviewee firm to have a representative assisting as a reviewer in another quality review programme.\(^{26}\) The latter benefit ensures greater cross-fertilisation of ideas owing to double exposure to techniques of other firms. The comments quoted in Ecton’s analysis reveal great satisfaction by the reviewee firms, who enthusiastically recommend participation in the review programme. To ensure success of such a programme, the selection of the reviewers is of the utmost importance. Ecton observes that the needs of firms seeking assistance, as well as their size and nature of clientele are major factors in selecting the reviewers.\(^{27}\)

In his conclusion, Ecton indicates that:

"Too broad a generalization as to the reception the quality review program has experienced could be subject to dispute, given the relatively small number of firms included in this survey. However if those firms contacted are representative of all those which have participated in the program, then its value can be stated in the most glowing terms;" \(^{28}\)

An earlier analysis of the quality review programme was done after it had been operational for two years.\(^{29}\) The main benefit they illustrate is the cross-fertilisation of ideas between practitioners who have similar problems. Their discussions served as the necessary catalyst for managers to implement changes that they knew were necessary, but they lacked the motivation to rectify the shortcoming.\(^{30}\) In their conclusion the authors express the opinion that the programme appears to have been a success, but the real value

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26) Loc. Cit.
27) Ibid., p.108.
28) Loc. Cit.
30) Ibid., p.104.
will only be determined by measuring its impact on raising the level of competence throughout the profession.\textsuperscript{31)}

The importance of peer or quality review has been recognised by the Securities and Exchange Commission in the United States of America. The Chief Accountant of the Securities and Exchange Committee, John C. Burton, was quoted as saying that peer review is in the public interest and that it will serve as a prod to the accounting profession to improve its standards.\textsuperscript{32)} These comments were made after a federal judge had approved a judgement against Laventhal, Krekstein, Horwath and Horwath, one of America's twelve largest accounting firms. One of the big eight firms, Peat, Marwick and Mitchell, also agreed to have their procedures reviewed by another big eight firm, Arthur Young and Company. The results of the review were published recently and generally speaking, the procedures of Peat, Marwick and Mitchell were approved by Arthur Young, subject to a few exceptions. This review was also as a result of pressure from the Securities and Exchange Commission after some major cases against Peat, Marwick and Mitchell. The expenses in both cases were borne by the reviewee firms.

Harvey Kapnick, chairman of the firm Arthur Andersen and Company, takes issue with the validity of the quality review programme.\textsuperscript{33)} He states that the accounting profession must assure the public that the quality of work being performed is satisfactory. He believes that the quality review programme is not a successful solution to restoring the public's faith in the quality of the work being rendered by the profession.\textsuperscript{34)} He submits that if it fails because

"it provides no standards against which the quality of practice

\begin{itemize}
\item \textsuperscript{31)} Ibid., p.105.
\item \textsuperscript{34)} Ibid., p.50.
\end{itemize}
and controls over practice can be measured, and because it results in an invasion of the rights of clients to have information about them maintained in confidence." 35)

Kapnick believes that a loss of confidentiality by clients in the profession will lead to less reliable financial statements because clients will withhold important information. He continues:

"Accountants would be placed in an impossible position if clients declined to provide information on the basis that assurance could not be provided as to its confidentiality. This is more than a matter involving ethical rules, since the basic integrity of the accounting profession is at stake. The public would not be well served by such a requirement imposed by the Securities and Exchange Commission or imposed unilaterally by the profession." 36)

He feels the solution would be for accounting firms to report their organisational and operating structure publicly. He suggests that information be given about practice controls, training programmes, resource and research materials, personnel evaluation concepts and the like. This, he maintains, will enable the public to judge for itself whether a firm has the ability to control its own practice. 37)

A further suggestion is that accounting firms establish a Public Review Board composed of independent parties, some of whom will be from outside the profession, to review the organisational structure and operating procedures of a firm, and to comment on basic issues involved in litigation proceedings related to that accounting firm. Harvey Kapnick stresses with great emphasis the interest of the public at large by stating that:

"Accountants must recognise in the final analysis they are accountable to the public at large. ... Therefore it is in the interest of all who wish to uphold our free enterprise system and improve business decision-making for the good of society that the accounting profession retain its credibility and carry out its public interest responsibility." 39)

35) Loc. Cit.
36) Ibid., p.51.
37) Loc. Cit.
38) Loc. Cit.
39) Loc. Cit.
It is difficult to counter the argument about the loss of confidentiality resulting from the quality review programme, but it must be borne in mind that the reviewers are accepting a professional assignment and have to maintain the highest standards of professional ethics. As pointed out above, the reviewers are from a different geographical area.

Would it be detrimental to the reviewee firm to obtain the consent of the six to eight clients whose working paper files would be open to the review? It is believed that it would not be detrimental if it is pointed out that by having this review, the firm is endeavouring to improve its service to its clients, and the quality review programme is, in fact, endorsed by the controlling bodies of the profession. It is believed that the cross-fertilisation of ideas within the profession can ultimately be beneficial to the profession as a whole. The improved competence resulting from this will serve the interests of the public more effectively.

15.6 Quality Control Registration Programme

Another development presently being discussed is the American Institute of Certified Public Accountants' Firm Quality Control registration. This plan will allow the registration of accounting firms complying with certain audit practice quality control standards, and this would be part of a voluntary programme. The features of the programme are that all partners of the firm shall be members of the American Institute of Certified Public Accountants, and the firm would submit documentation indicating its quality control practice, which would be reviewed by a quality control committee, for consistency with specified standards. If the standards are not acceptable to the committee, the firm will be afforded the opportunity to conform with the committee's requirements. A firm will have to submit

42) Loc. Cit.
43) Loc. Cit.
an annual report reflecting any changes in quality control policies, and details of what internal reviews were made to ensure compliance with the firm's quality control programme. These reports are also to be reviewed by the committee. The documentation submitted would be available to the public for inspection, and firms would agree to undergo field tests, with or without advance notice. These tests are to be conducted by reviewers supplied under the direction of a committee. If the field tests reveal deficiencies, the firm will be given a reasonable time to correct them. Failure to rectify such deficiencies would result in deregistration, which would be published in the CPA Letter and The Journal of Accountancy, and a copy of the letter would be placed in the Institute's public file.

A firm may advise its clients of its registration, indicate such registration on its letterhead and also be entitled to registration in the Institute's directory, Accounting Firms and Practitioner.

It was felt that there is a need for this programme as self-regulation of the profession has always been directed at the individual and not the firm.

15.7.1 Required Continuing Education in the State of California

An examination of the continuing education rules of the State Board of Accountancy for the State of California reveals that they are very similar to the guidelines of the American Institute of Certified Public Accountants. These regulations indicate that eighty hours of required continuing education are required every two years. The regulations also permit credits for published articles and books. A Continuing Education Committee would be responsible for awarding credits.
An applicant wishing to renew his licence must sign a statement under penalty of perjury, disclosing how he has complied with the eighty-hour education requirements. These reports may be verified on a test basis by the Continuing Education Committee.\(^{51}\)

The Continuing Education Committee consists of five members and the functions of the Committee are: to act in an advisory capacity on the working of the programme to the State Board of Accountancy; to make policy recommendations to the Board; to review specific programmes; to determine their acceptability; to verify information submitted by applicants on a test basis; to consider and evaluate requests for exceptions and to perform such functions delegated by the Board.\(^{52}\)

The Continuing Education Committee has indicated that any licencsee performing duties for compensation, normally performed by public accountants, including the preparation of tax returns, is subject to the continuing education rules.\(^{53}\) The Continuing Education Committee has also given an indication of acceptable subject matter, as long as they contribute to the professional competence of a practitioner:

- Accounting and Auditing
- Taxation
- Management Services
- Communication Arts
- Mathematics, Statistics, Probability and Quantitative Applications in Business,

\(^{51}\) Ibid., p.4., Rule 89.

\(^{52}\) Ibid., p.1.

\(^{53}\) Ibid., p.1. Clause 1(a)
The State Board of Accountancy may approve purveyors of continuing education. It is not a prerequisite that courses be approved in advance, because the onus rests on the licencee to prove that this course has contributed to his professional competence. In practice however, most organisations do file a sponsor's agreement with the State Board of Accountancy to attain a seal of approval for a course. In their interpretations of the Continuing Education Rules, the Continuing Education Committee has indicated that approval of non-credit programmes as well as the organisations presenting these programmes will be given in advance. The organisations presenting these programmes will be permitted to advise prospective participants of this approval as well as the number of hours of credit allowable for each programme. Such approval may be revoked if the rules are not complied with or the standard of the presentation is lacking.

54) Ibid., p.2., Clause 2.
55) Ibid., p.2., Clause 5.
56) Ibid., p.2., Clause 4.
Discussions at dinner, luncheon or breakfast meetings of recognised accounting organisations may qualify if they comply with the basic requirements for approval of courses.\(^{57}\) Firm meetings for staff or management groups may also qualify if they meet the requirements for approval of programmes, and cover the approved subject matter as indicated above.\(^{58}\)

The Continuing Education Committee determines the credit to be allowed for correspondence and individual study courses. This is based on the equivalent credit for a comparable seminar presentation. The licencees claiming credit for such courses must submit satisfactory evidence from the sponsoring organisation that they have completed the course.\(^{59}\)

Instructors at presentations are allowed two hours credit for each hour of presentation at an approved programme, provided that a maximum credit for such preparation and teaching will not exceed 50% of the basic continuing education requirement.\(^{60}\)

Authors of published articles and books are entitled to a credit, provided they contribute to the professional competence of the licencee. These credits may not exceed 25% of the basic requirement and it is given on the self-evaluation of the author. A greater credit may be claimed in exceptional circumstances, if the licencee applies for such credit by submitting the articles or books to the Committee with an explanation of the circumstances that justify a greater credit.\textsuperscript{61)\textsuperscript{\textsuperscript{}}}

The Continuing Education Rules do provide for a practising accountant from industry to re-enter if certain courses are attended.\textsuperscript{62)\textsuperscript{\textsuperscript{}}}

If a licence has expired, it may be renewed within a period of five years after its expiration. The necessary forms must be completed and fees paid. The number of hours of continuing education required varies from forty to eighty hours depending on when the application is made.\textsuperscript{63)}

15.7.2 California Certified Public Accountant Foundation for Education and Research

The California CPA Foundation has built up a sound reputation for its presentations and a visit to the Foundation in Palo Alto backs up this reputation. Other State Societies have high regard for the California CPA Foundation for Education and Research.

The California CPA Foundation with assistance from volunteers, was founded in 1966. Course registration fees financed operations. Presently many courses are presented by the California CPA Foundation in many states, namely Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming.

The facilities at the California CPA Foundation for Education and Research at Palo Alto and Los Angeles are very modern indeed. The equipment consists of audio tape deck, rear-screen projection for overhead, 35mm. filmstrip and 16mm. projectors. The lecture rooms can accommodate 45 on a schoolroom basis or

\textsuperscript{61) \textit{Ibid.}, p.3. Clause 10.}
\textsuperscript{62) \textit{Ibid.}, p.4. Clause 91.}
\textsuperscript{63) \textit{Ibid.}, p.5. Clause 92.}
30 on a seminar basis.

The Executive Director of the California CPA Foundation, Mr. John Bickle, indicated that the most popular course presentations are taxation. These courses are presented live in the larger centres. One of the live presentations in Los Angeles was videotaped and this is used for presentations in smaller centres. The Foundation does not employ full-time lecturers, but it endeavours to get experts who are remunerated on a daily basis to do the presentations. University lecturers also assist with the presentations. Lecturers are expected to attend seminar leadership workshops where they are instructed on how to approach their lectures and how to motivate the participants.

The Foundation intends employing two full-time research officers to review the quality of presentations, to revise and update present material and to review material that has been submitted to the Foundation for future courses.

The courses consist mainly of case studies. Participants complete evaluation statements at the end of a course. The instructor also evaluates the material. The appraisals of the participants are analysed and a summary evaluation is prepared to determine what is wrong with a presentation. If there is a major deficiency in a programme it will be withdrawn.

The programmes offered by the California CPA Foundation are divided into six categories:

(a) Conferences consisting of lectures and panel discussions by authorities on specific subjects. Question and answer sessions follow the lectures. Small group discussions are also encouraged. These conferences range from one to three days and are designed to serve large groups.

(b) Seminars under the guidance of an experienced discussion leader for groups of twenty-five participants who review cases and solve problems.
(c) Lecture courses utilising lectures, demonstration and problem solving to provide in-depth instruction and training in specialised subjects, which cannot be presented in seminar form. These courses are of one or two days duration.

(d) Workshops provide hands on training in techniques and procedures.

(e) Training programmes of two to five days provide staff members of accounting firms with intensive practical training. The longer presentations may be residence presentations to encourage full involvement of participants.

(f) Individual self-study materials consist of programmed self-study courses designed for use in home or office. 64)

The courses presented are of a very diverse nature and include accounting, auditing, taxation, management advisory services, practice management and courses for specific industries. A perusal of the catalogue indicates that there are forty-one courses under the heading "Accounting and Auditing", four staff training programmes at different levels, twelve courses under the heading, "General Profession", ten courses under the heading, "Management Advisory Services", nineteen courses under the heading, "Practice Management", Nineteen under the heading "Specific Industries", forty-eight under the headings "Taxation" and "Advanced Taxation", fourteen under the heading, "Estate Taxation". There are five self-study courses and they are: "Ethics for Certified Public Accountants", "Secretarial Orientation to Public Accounting", "Tax Training for Auditors", "Written Communication Skills" and "Practical Applications of APB Opinion 21". Cost of courses vary from fifteen dollars for self-study courses, to four hundred dollars for specialised electronic data processing courses.

64) California CPA Foundation for Education and Research, Continuing Professional Education Catalog, April 1975 to March 1976, p.3.
15.7.3 Statistics of the First Licence Renewal under Mandatory Continuing Professional Education in California

In a report by the chairman of the Committee on Continuing Professional Education, Dr. Alan P. Johnson, submitted to the National Association of State Boards of Accountancy in California, it is stated that the profession in California has taken the programme very seriously and has complied with the regulations more fully than had been anticipated.65) Problems anticipated by the programme administrators during the formative period did not materialise. Dr. Johnson states:

"One major question frequently asked at the inception of the program was, 'What will be the impact on the total number of licensees as a result of the additional requirement?' Some thought that a relatively large number would surrender their permits to practice rather than comply with the CPE legislation. This has not proven to be the case." 66)

An analysis of the statistics in the abovementioned report reveals that 87% of those licensed on 31 December 1974 had received their licences by 22 April 1975. An analysis of the 3597 licensed at 31 December 1974, who had not renewed their licences by 22 April 1975 showed that 1025 were due to undelivered mail, which is regarded as normal for the renewal period. The remaining 2572, it appears, have allowed their licences to lapse. If the total of 3597 is compared to 3202 licences not renewed after 31 December 1972, the difference of 395 represents a real loss of 1.6% of total licences as a result of the inauguration of continuing professional education.67)

The report also refers to the quality of programmes attended by licencees. A random sample indicated that the quality of programmes attended was high, thus dispelling the fears of the sceptics who expressed the view that low quality courses would be attended so as to comply with the requirements in the easiest manner. The report indicates that the Californian


66) Loc. Cit.

67) Ibid., pp.1/2.
Committee has also felt that it is dealing with professional people, to whom time is important and they will seek their money's worth. The time reported by many licencees was well in excess of the required sixty hours for the first registration period. The mean reported hours was eighty-eight and this figure may be less than the actual hours attended as many licencees discontinued listing the hours attained after they had achieved the required sixty hours.\(^{68}\)

A random sample of the returns indicated the manner in which the required hours were attained. The sample yielded the following distribution of activities:

<table>
<thead>
<tr>
<th>Programmes</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>National and State Accounting Organisation courses</td>
<td>36</td>
</tr>
<tr>
<td>University and College courses</td>
<td>21</td>
</tr>
<tr>
<td>In-house programmes</td>
<td>17</td>
</tr>
<tr>
<td>CPA Society Chapter programmes</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
</tr>
<tr>
<td>Correspondence and self-study courses</td>
<td>3</td>
</tr>
<tr>
<td>Service as an instructor</td>
<td>4.5</td>
</tr>
<tr>
<td>Publications</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

Certain reporting problems were experienced and an audit revealed that 4% were being questioned.\(^{70}\) A closer scrutiny of the 4% revealed that more than half were for non-substantive reasons, such as inadequate information being furnished, and the claiming of unusual courses, which proved to be acceptable. Thus less than an effective 2% were suspect because of substantive problems such as courses being duplicated, informal self-study, courses taken prior to the commencement period and hours claimed which were disallowed as being in excess of that approved in the regulations.\(^{71}\) The Continuing Professional Education Committee can indeed feel very satisfied with the first reregistration effort since the introduction of required continuing education in California.


15.8 Review of Continuing Educational Requirements in the Rest of America

Many states have voluntary continuing educational programmes and have come out very strongly against mandatory continuing education. It is admitted however that a mandatory programme may ultimately have to be enforced if the voluntary programme is unsuccessful. The New York State Society of Certified Public Accountants favours a voluntary programme, but accepts the fact that if it is not successful, a mandatory programme will have to be adopted as a last resort.\textsuperscript{72}) It is intended for the present time and for the foreseeable future that New York State will follow a voluntary rather than a mandatory continuing education programme.\textsuperscript{73})

The voluntary programme known as, "Certificate Program of the New York Society of Certified Public Accountants", becomes effective for the two years ended 31 December 1975 and certificates are valid for the two years ending 31 December 1977. The primary objectives of the Certificate Program are:

"... to raise the professional practice of Certified Public Accountancy by giving special recognition to those CPAs who enhance their professional competence by engaging in advanced educational activities in the field of accountancy and related disciplines as sponsored. ..." \textsuperscript{74})

Eighty hours of continuing education are required to qualify for the certificate and at least twenty percent of a candidate's credits must be earned in courses under the sponsorship or co-sponsorship of the New York State Society of Certified Public Accountants and/or its Foundation for Accounting Education Inc.\textsuperscript{75}) Candidates are expected to submit a formal record of courses completed. Due to the diversity of regulations appertaining to continuing education in the various states, the formal record of participation will facilitate a candidate's transfer to other states.


\textsuperscript{74}) New York State Society of Certified Public Accountants, Continuing Professional Education Certificate Program of the New York State Society of Certified Public Accountants, announcement brochure.

\textsuperscript{75}) Loc. Cit.
It is intended to publicise the programme and a member who has completed the programme will receive a letter to that effect. Copies of the letter may be distributed by members in an ethical manner to any person or organisation in terms of the Society's Rules of Professional Conduct.\textsuperscript{76)} A strange form of publicity will be given to candidates who complete the programme as

"... A press release ... will be sent to a local newspaper or other local publication designated by the recipient." \textsuperscript{77)}

It is wondered whether the course is really so voluntary under the circumstances.

The State of Florida has a different approach to the relevant legislation. The legislation gives the practitioner the option of writing a professional examination in public accounting, or completing the prescribed number of hours in continuing education programmes.\textsuperscript{78)} The legislation provides for the examination to cover accounting, auditing and related subjects and current developments as well as rules of professional conduct of the State Board of Accountancy, with the discretion of the Board, it may be an open-book examination. The examination shall be held at least twice per year and a candidate who fails the examination may sit for the examination again subsequently.

Legislation in some states requires members in public practice only to comply with the required continuing professional education.\textsuperscript{79)} The State Society in Arizona requires all members to comply voluntarily with required continuing education, but no hours are specified.

The subjects that qualify for the required continuing education vary from state to state. The State of Florida specifies that at least 25\% of the prescribed time, (varies from 90 to 120 hours), must be in accounting related and auditing related subjects. Other subjects are accepted if they contribute directly to the professional competence of a

\textsuperscript{76)} Loc. Cit.

\textsuperscript{77)} Loc. Cit.


\textsuperscript{79)} State Continuing Education Rules and Regulations, Furnished by Price Waterhouse, New York.
licencsee who wishes to practise public accounting. The States of Alabama and Florida indicate accounting, auditing, taxes and management accounting as acceptable subjects. Related areas relevant to public practice are also allowed. The states of Kansas, Montana, New Hampshire and North Dakota, Texas, Washington and Wisconsin indicate no specific subjects, but accept any formal programme of learning which contributes directly to the competence of a licencsee who wishes to practise public accounting. Some states have indicated as many as eighteen subjects which qualify for the continuing education requirements.

The reporting requirements differ from state to state. Most require annual reporting, one state expects a report on a course by course basis, another bi-annually, and another requires a report tri-annually. Besides the State of California, statistics are available for the states of Colorado and Nevada, which respectively indicate a compliance of 99% and 96%. The eighteen states that have a mandatory continuing education requirement are: Alabama, California, Colorado, Florida, Hawaii, Iowa, Kansas, Nebraska, North Dakota, Nevada, New Mexico, Ohio, Oregon, South Carolina, South Dakota, Vermont, Washington and Wyoming.

It is difficult to generalise about the continuing professional education of the various states, and to date eighteen states have programmes either because of legislation or because Board regulations require them. Much has been written about continuing education in the United States of America, but the majority of states have not yet committed themselves to this concept. By far the greatest number of Certified Public Accountants are concentrated in the states of California, Illinois, New York and Texas and it is only the State of California which has mandatory continuing professional education requirements. The Californians have proved that it can work quite successfully, but their colleagues in the State of New York have not yet been convinced that it is practically feasible.


81) Loc. Cit.
15.9 Rules Review, and Legality of a Continuing Education Requirement

The National Association of State Boards of Accountancy sponsored a conference on Continuing Education Requirements, which was held in Colorado during May 1975. The purpose of the conference was to provide a forum for discussion and exchange of information among state board members and others involved in the promulgation and administration of continuing education requirements for public accountancy licensure. Various problems and their solutions were discussed at the conference.

Quality control of courses was problematical as well as the diversity of rules applicable in the various states. The hope was expressed that one set of regulations would ultimately be accepted.

Another aspect discussed was the action to be taken in the event of non-compliance by a member of the continuing professional education regulations. It was stated that procedures should be established whereby fairness would be ensured. Formal hearings should be provided for and disciplinary action be taken when warnings and grace periods have been ignored.

The legality of continuing education requirements was also discussed by Robert W. Hill. As far back as 1889 a decision was handed down by Justice Field, in the case of Dent v. West Virginia, upholding West Virginia's physician licensing laws:

"The same reasons which control in imposing conditions, upon compliance with which the physician is allowed to practice in the first instance, may call for further conditions as new modes of treating disease are discovered. ... It would not be deemed


83) Ibid., p.9.
a matter for serious discussion that a knowledge of the new acquisitions of the profession, as it from time to time advances in its attainments for the relief of the sick and suffering, should be required for continuance in its practice. ..." 84)

The Supreme Court of Wisconsin stated in Week -v- State Board of Examiners:

"The fact that a person is once licensed does not create a vested property right in the licensee, as advancements in the trade or profession may require additional conditions to be complied with if the general welfare of the public is to be protected. ... Respondents argue the legislature has the right to decide whether advancements in their profession require those engaged in its practice to attend educational programs in order to continue practicing. To this we agree." 85)

In a recent case, Lichtman -v- Ohio State Board of Pharmacy, Professor Hill reported that the Supreme Court of Ohio upheld the ruling of the Ohio State Board of Pharmacy. Public interest was seen to be of utmost importance and the ruling states:

"The purpose of this section is to protect and guarantee health, safety and welfare of the citizens of Ohio by requiring that those persons performing services in the area of drugs and medication have the necessary expertise by keeping abreast of new developments in the pharmaceutical area." 86)

In a few instances continuing education statutes have been held invalid, mainly because they delegated authority to professional societies. 87) The exposition of the above legal requirements has been given to indicate that members of various societies may challenge the legislation enforcing continuing educational requirements. This must be seen in the light of Americans' obsession for litigation and it is submitted that such litigation is detrimental to the image of a profession. It is acknowledged that the findings of an American Court of Law may not necessarily be accepted by South African Courts.

84) Loc. Cit.
85) Loc. Cit.
86) Ibid., p.10.
87) Loc. Cit.
15.10 A Canadian Approach - Views of Special Committee on Required Professional Development

During August 1975 a Summary Report of the "Special Committee on Required Professional Development" was published by The Canadian Institute of Chartered Accountants. The main recommendation of this committee is:

"All (emphasis added) Chartered Accountants must demonstrate that they are continuing their professional education as a condition of renewing membership in a provincial institute." 88)

Note that all members are subjected to the requirement, but although the committee acknowledges that this is desirable and the ultimate goal, an exemption is recommended for members not engaged in public accounting. The reason for exempting chartered accountants not in public practice is that the public interest is not as important for members in industry, government and education. An onerous bridging back requirement for those desiring to return to public practice from industry, should encourage exempt members to comply with the recommended requirements. 89)

The Committee utilised a questionnaire to determine the opinions of the members, and over half the respondents indicated that there should be a required professional development programme for all or some members. Two-fifths indicated a preference for an optional programme for all members and only five percent were in favour of the status quo. Re-examination as an alternative to required professional development was rejected by a small majority, although a few provinces did favour this means. Mandatory re-examination as a sole requirement was favoured by very few members. 90)

The major objectives of a professional development programme should be to maintain a level of technical knowledge and to demonstrate concern for public interest. 91)

88) Canadian Institute of Chartered Accountants, Summary Report of the Special Committee on Required Professional Development, Toronto, August 1975, introductory page.

89) Ibid., pp.9/10.

90) Ibid., p.3.

91) Loc. Cit.
The recommendations of the Special Committee may be summarised as follows:

(a) That the basic requirement be the accumulation of 200 units of credit in every three-year period by members in public practice. Members not in public practice are exempt and there are also certain exemptions for age, as well as discretionary exemptions on grounds of illness, foreign residence, partial retirement or other special circumstances.

(b) That the two hundred units of credit be made up as follows:

(i) a minimum of one hundred units of credit in core area of accounting which encompasses financial accounting and reporting, managerial accounting and control, finance and computers and data processing (excluding computer auditing)

(ii) an additional one hundred units of credit at the option of the members in accredited non-core subject areas

(iii) that one hundred units of credit in the core areas of auditing and taxation in addition to the basic requirement be accumulated by members in public accounting. This is subject to a minimum of twenty units of credit in each area. The core area of auditing encompasses auditing and professional practice as well as computer auditing, and taxation includes federal and provincial taxation.

(c) A voluntary programme of professional development complying with the basic requirements as set out above be undertaken by members who are exempt.

(d) There are bridging provisions for a person desiring to return to public accounting. These specify that within twelve months of changing to his new status, he be required to make up units of credit for a member engaged in public accounting for a six-year period before his change of status to public accounting. Public accounting includes members involved in related
functions (through a firm affiliated with a firm in public practice) such as management consulting, bankruptcy and data processing.

(e) That the first measurement period is to commence with effect from 1 January 1978, and members are to submit necessary evidence of satisfactory completion by 31 December 1980, and renewal of membership is to be contingent on this evidence. 92)

Certain definitions need to be examined. Units of credit, the Special Committee feels, is a more appropriate unit of measurement than simply using course days or course hours. The reason is that it permits easier accreditation of non-classroom learning activity, and courses can be accredited by taking quality into account rather than just simply duration. It was suggested that a one-day course be equated with twenty units of credit. 93)

The core areas of knowledge accepted by the Committee are accounting, auditing and taxation. It is suggested that non-core areas of knowledge should be restricted to areas directly contributing to a member's technical knowledge.

Formal and informal learning will be recognised, the latter being limited to those courses which can readily be measured. Activities such as writing of text books and technical articles which appear in recognised professional journals, attendance at technical sessions of conferences of recognised professional organisations will also qualify. The maximum credit for these activities is limited to 20% of the three-year requirement. Formal learning activities, organised by professional institutes or other bodies which contribute directly to updating of members' technical knowledge, will qualify.

Credits will also be granted for developing teaching or revising accredited courses. Members serving on the

92) Ibid., pp.5/7.
93) Ibid., pp.6/7.
Canadian or provincial institutes' technical committees will also be given credits.

It is suggested that the programme be adopted uniformly throughout Canada to ensure membership reciprocity between provincial institutes. The observation is made that the lack of uniformity in the United States of America has created many administrative problems as a result of lack of reciprocity between State Boards of Accountancy. 94) It is suggested that members report annually to their provincial institutes what courses they have attended during that year. 95) If a member does not qualify, he must make up the shortfall in order for his membership to be renewed. Records will also be kept for those members who comply on a voluntary basis.

In an analysis justifying a required rather than a voluntary programme the following observations are made, that

(a) the public interest has been taken into account by reassurances that the profession is endeavouring, as far as possible, to ensure that members are keeping up-to-date;

(b) it rejects the market-place argument that supposedly ensures that members will keep up-to-date with the latest developments. Incompetence or inadequate service is normally only discovered after the damage has been done. A voluntary programme will not effectively ensure that the member who requires updating most, participates in the programme. 96)

The Canadian Institute of Chartered Accountants has discussed the recommendation of the Special Committee and it appears that the recommendations will not be implemented on the schedule outlined in the report. 97) A review of recent

94) Ibid., p.7.
95) Ibid., p.8.
96) Loc. Cit.
Canadian accountancy literature indicates that the Canadian Chartered Accountant is anticipating some form of mandatory required professional education. The implementation of the recommendations is now a decision which rests with the provincial institutes.

15.11 Conclusion and Recommendations

It has been stated that professional competence is an insidious and creeping mental paralysis affecting all age groups and classes of accountants - even the newly qualified accountant. There can be no doubt that there will be an explosion of knowledge as well as an explosion of expectations in the next decade or so. Bearing public interest in mind, it is important for the practitioner to be seen to be maintaining his competence. For a practical-experience requirement to be meaningful, it is important that the principal be kept up to date with latest developments, so that a major problem in the practical-experience requirement, namely the trainee's progress is limited to the knowledge and competence of his principal, may be obviated. From the abovementioned reservations and anticipated growth of knowledge, there can be no doubt that some form of mandatory requirement may become necessary.

It is therefore suggested that a quality review programme, similar to the Peer Review Programme of the American Institute of Certified Public Accountants, be instituted so that the smaller and medium-sized firms may be afforded the opportunity of improving work standards. Development in the proposed Quality Control Registration Programme of the American Institute of Certified Public Accountants should be observed with close interest. (De Facto Quality Control of Stockbrokers' audits exist anyway in South Africa).

It is further recommended that the Public Accountants' and Auditors' Act be amended to provide for practising accountants

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to submit annual returns of their attendance at defined continuing education programmes.

It is further recommended that universities endeavour to develop specialist courses in co-operation with chartered accountants who may have the necessary expertise to assist with such presentations.

A mandatory programme is not recommended at this point in time, as the facilities available may be insufficient to meet the necessary demands to comply with a mandatory requirement. This should not be a deterrent in the long term, but should rather be seen as a challenge. In the meantime practitioners should be encouraged to attend approved courses on their own accord. The profession cannot afford a loss of image because of ignorance of new developments by a minority of its members.

The long-term goal must be to develop courses, so that mandatory continuing education will be the alternative to obsolescence.
PART V

RECOMMENDATIONS
16.1 Introduction

Before endeavouring to make recommendations with regard to accountancy education in particular, it is necessary to look at the accountancy profession in South Africa. It is believed that as the structure of the profession has played such a major role, and has influenced the education of chartered accountants in South Africa, it is necessary to examine the structure briefly and make recommendations, which if implemented, would then influence the recommendations relevant to accountancy education in South Africa.

It is also necessary to examine briefly what a profession is. Many endeavours have been made to define a profession, and G.W. Beck quotes Cogan's definition, which reads:

"A profession is a vocation whose practice is founded upon an understanding of the theoretical structure of some department of learning or science, and upon the abilities accompanying such understanding. This understanding and these abilities are applied to the vital practical affairs of man. The practices of the profession are modified by knowledge of a generalised nature and by the accumulated wisdom and experience of mankind, which serve to correct the errors of specialism. The profession, serving the vital needs of man, considers its first ethical imperative to be altruistic service to the client." ¹)

It is important to observe that this definition refers to the first ethical imperative being altruistic service to the client. It is submitted that this definition does not stress the service to the public, and Beck quotes another definition of a profession, which reads:

"a group of men pursuing a learned art as a common calling in the spirit of public service — no less a public service because

it may incidentally be a means of livelihood." 2) Many attempts at defining a profession have been made and an important characteristic is public service. Roy and MacNeill see the characteristics of a profession as follows:

"Each renders essential services to society.

Each is governed by ethical principles which emphasize the virtues of self-subordination, honesty, probity, devotion to the welfare of those served.

Each has requirements for admission to the profession which are regulated by law.

Each has procedures for disciplining those whose conduct violated ethical standards.

Each depends upon a body of specialized knowledge acquired through formal education.

Each has developed a language of its own, in its more sophisticated forms understandable only to the initiated." 3)

In defining policy and planning ahead, it is imperative that the public accountant of South Africa should bear in mind that public interest is one of the most important aspects of the accountancy profession.

16.2 Controlling Bodies of the Profession 4)

It has been stated that the decision-making process within the profession in South Africa is cumbersome and long. It has been stated that within the present structure of the controlling bodies of the profession there is substantial duplication of efforts, and in a profession the size of the South African one, the most effective utilisation of the shortage of manpower resources should be made. There are five autonomous disciplinary

4) For a detailed discussion see pp. 196/203.
committees in the profession. There is a proliferation of education committees within the profession with the Public Accountants' and Auditors' Board assuming responsibility for defining pre-qualifying educational requirements, and post-qualification education being the responsibility of The National Council of Chartered Accountants (S.A.) and the provincial societies. It is suggested that education is a life-long process and co-ordination of effort is necessary. Other committees also result in duplication of effort. It is imperative that streamlining of the controlling bodies be effected, because if certain recommendations are to be implemented, it is essential that the profession utilise its resources to maximum benefit.

It is recognised that a change by evolution is always better than a change by revolution. It must be stated that many of the changes in the accountancy profession are the result of certain compromises. No substantial change has been made in the profession since 1951. It is therefore recommended that the accountancy profession in South Africa give serious consideration to the rationalisation of the controlling bodies, so that the administration of the profession can be more effective. It is submitted that as the ultimate aim must be one controlling body for the profession, this will no doubt necessitate changes to the Public Accountants' and Auditors' Act. It is suggested that if such a change be effected the name of the controlling body possibly be changed to: "The Institute of Chartered Accountants of South Africa". No doubt if a truly unified profession were to come about, the regional associations would have to facilitate the administration of the profession in South Africa. It is submitted that if there was only one controlling body for the profession in South Africa, unnecessary duplication would be eliminated. Registration would be with one controlling body instead of three in many cases, namely Public Accountants' and Auditors' Board, a provincial society, and a regional society,
It is realised that such a recommendation would be difficult to implement, but it is submitted that although this is a substantial challenge to the profession, there have been endeavours within the profession to create a national society. This progress which began six years ago has been slow. It is submitted that if the suggestion made above is found to be too revolutionary, the profession should endeavour to form a national society. Unfortunately, if the latter were to be instituted, it would possibly mean the efflux of many years before a major change could again come about in the profession.

It is necessary for the profession to improve its image and no doubt this could be done if the entry standard were improved and if a more positive outlook were adopted. The Accounting Development Foundation formed during 1974, has collected a fair sum of money. It is submitted that the amount collected to date, that is within a period of less than two years, is a paltry sum for a profession the size of the accountancy profession in South Africa. The sum collected until 31 December 1975 amounted to approximately R89 000 and if the number of practising chartered accountants in this country is taken into account, it will be found that the contribution amounts to less than R20 per practising chartered accountant, per annum. It is therefore recommended that the accountancy profession endeavour to sell its own profession to its members. It is further recommended that to promote The Accounting Development Foundation, practising members be approached to sign debit orders at R10 per month over a three-year period. This should amount to approximately R1 million. It must be observed that the sums contributed by a practising accountant are tax deductible and the net contribution is not that substantial. If the profession could show that a substantial contribution has been made by its own practising members, no doubt it could confidently canvass the large listed companies, other large companies and state corporations to make contributions to The Accounting Development Foundation. A sound base would be formed and these funds could then place the profession in a very strong position.

The profession would then be in a position to create scholarships to attract fair numbers of bright students who could study full-time. Sufficient funds could be generated ensuring that the profession has the necessary staff to effect required research. It is submitted that in view of the resources available to the overseas accountancy institutes, pronouncements of the overseas institutes be examined with care and adapted to comply with South African circumstances.

If the profession has a sound financial base enabling it to subvent salaries of academics at universities to a greater extent than is presently the case, this would result in a better staffing situation at universities. The position could be envisaged where members in public practice or in commerce and industry might decide after fifteen years of constant pressure that they would like to make their expertise available at a university. The salaries offered by universities could not attract these chartered accountants. It is submitted that the income of these people would be less but the difference would not be as great as is presently the case.

16.3 Practical-Experience Requirements

It is believed that the profession should effect greater control over the quality of experience to which the trainee accountant is being exposed. It is submitted that a practical-experience requirement be retained, as training is seen as being complementary to education. It is necessary that the profession give guidelines to firms about the experience requirements for a trainee accountant.

It is therefore recommended that should a rationalisation of the controlling bodies come about, with effective utilisation of manpower resulting therefrom within the

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6) For a detailed discussion see pp.283/291.
profession, that an accreditation committee be established
to determine whether firms may be approved as employers for
trainee accountants. The criteria, by which the accredita-
tion committee will judge whether firms have the variety of
experience, would be sufficient exposure to pure auditing
assignments, and a reasonable exposure to the other aspects
of an accountant's work, namely accounting, taxation, and
management advisory services.

It is recommended that the articles of clerkship or service
contract be dispensed with, and that approved employers issue
employment certificates stating that a trainee accountant
has served with the firm for a specific period, that the
experience he has been exposed to, in the opinion of the
firm, is sufficient, and that, in the opinion of the
chartered accountant at the particular firm, the person is
fit and proper to practise as a chartered accountant.
Approved firms would be expected to submit half-yearly
returns of trainee accountants in their employ.

It is further recommended that free transferability be
allowed within the profession, subject to the constraint
that any periods of less than six months for graduates and
ten months for matriculants will not be recognised. It is
submitted that this transferability should result in an
improvement in the quality of experience to which trainee
accountants will be exposed. In view of the freer
transferability, it may be necessary for trainee accountants
to record their work experience periodically, classified into
various work categories. The employer would counter-sign
this record and have duplicate records for each trainee
accountant. It is suggested that the profession investigate
the possibility of requiring firms to submit training records
for trainee accountants, but reservations are expressed
about the desirability of such trainee records. On the
other hand if there is free transferability and the market
place determines what type of experience the trainee
accountant will be exposed to, it may be advisable to have
such records available.
It is recommended that quotas be more flexible as large firms employ audit managers who supervise the trainee accountants. The experience of these audit managers is at least the equivalent of many partners in small and medium-sized firms, if not better. The envisaged accreditation committee should be given discretionary powers. It is submitted that if more trainee accountants have exposure to auditing at large firms, this can only be beneficial to the profession in the long run.

16.4 Post-Qualification Practical Experience Requirement

It is recommended that an additional period of post-qualification experience be imposed before a chartered accountant may practise under his own name. It is suggested that the additional approved experience be for two years. The type of additional experience will depend on the nature of the experience that he has had to date. It is realised that this recommendation applies to a minority of chartered accountants. Chartered accountants in large firms generally spend years before becoming partners in the firm and the recommendation would thus not apply to many chartered accountants. Chartered accountants who have partnership potential normally stay on with their firms, and unfortunately many chartered accountants who have no partnership prospects, open up under their own name. It is submitted that in the interests of the profession, of the public as well as in the particular interest of that chartered accountant, he be exposed to further experience, prior to being allowed to practise under his own name. The question arises whether a chartered accountant should serve the additional practical-experience requirement at the same firm or at another firm. The nature of work being performed by the firm, will determine whether the chartered accountant should move to another firm, to ensure that he has exposure to different types of audit and accountancy assignments.
16.5 Supplementary Practical Training

It is necessary that the accountancy profession provide for certain in-office instruction. This instruction should apply to the more professionally-oriented aspects and the application of the theory taught at universities. The terms of reference of the Supplementary Practical Training Committee of National Council are defining the areas in which training at pre-qualification level is required, detailing specifications of training and methods to be adopted and arranging for the provision of such material. It is envisaged that course material be made available for use in offices of practitioners. Expeditious preparation of course material is necessary and the profession should appoint a full-time research officer to design the material for the smaller and medium-sized firms.

In defining educational and training requirements for the future chartered accountant, the insurmountable hurdle of the dichotomy of interests between the large and small firms appears. It is recommended that the smaller firms be encouraged to form consortia whereby they can mount their own courses for their trainee accountants.

16.6 The Final Qualifying Examination

It has been suggested that the format of the Final Qualifying Examination be changed. It is submitted that this is a matter of urgency as the education at universities has suffered as a result of the so-called "minimum requirements" prescribed by the Public Accountants' and Auditors' Board. This is not a local phenomenon only as the same situation seems to exist overseas.

It is therefore recommended that a more case study oriented examination be held, with greater emphasis on the professional


8) For a detailed discussion see pp. 341/358.
aspects such as auditing, ethics, taxation, presentation and interpretation of financial statements. Case studies and multiple-subject questions could test the other related fields. It is also important that the candidates be tested on the latest controversial aspects within the profession, thus ensuring that they read the latest literature. It is further submitted that this be an open-book examination with students being allowed to have the latest statutes at their disposal. No advantage can really accrue from having text books, but this does place the student in an in-office environment.

With regard to the contents of the final qualifying examination, it is suggested that integrated papers, consisting of subject matter from all subjects be set. It is further submitted that the final qualifying examination should be held during the last year of the practical-experience requirement.

It is suggested that the profession investigate the possibility of applying statistical formulae for adjusting the raw scores of candidates. Statisticians maintain that the quality of the candidates in a large population should not vary materially from year to year, and if there are large fluctuations these are caused by other factors such as inconsistency in the standard of the examination paper. It has been stated that a population of four hundred should be sufficient to ensure the application of statistical formulae.

If the nature of the final qualifying examination were to change and not be just a re-test of what has been taught at universities, but a case study approach concentrating on professional matters, the universities could concentrate on giving the students a broader accountancy education with less emphasis on techniques and more emphasis on the underlying philosophies and theories. Before the profession can entertain the idea of a more professionally-oriented examination, it must ensure that the candidate has been exposed to the right type of experience.
It is recommended that the Public Accountants' and Auditors' Board publish pilot examination papers as and when the format of the examination changes, as an indication of the expected standard.

The Public Accountants' and Auditors' Board has decided that a trainee accountant or candidate for the final qualifying examination can have only five attempts at such an examination. It is suggested that the candidate initially be given only three attempts at this examination. As it is not intended to make the examination easier, the candidate must then attend university for a full academic year, after which he be given another two attempts. If he fails he should not be allowed to rewrite.

From the abovementioned recommendations it will be seen that major changes are required within the profession. They can be summarised as a rationalisation of the controlling bodies of the profession, a radical change in the practical-experience requirements and a major change in the format of the final qualifying examination which should not stultify development at universities.

16.7 Universities 9)

It is recommended that the Public Accountants' and Auditors' Board review the contractual relationship with the universities. Standards of accreditation of universities must be defined taking into account satisfactory staffing situations and syllabi of universities must conform with certain broad outlines. Liaison between the profession and academics is essential. It is suggested that the number of contracting universities be reduced to a maximum of seven or eight. This would ensure a higher standard and result in more effective use of the available manpower. It is submitted

9) For a detailed discussion see pp.271/274.
that the University of South Africa could play a substantial role educating students in those centres without a department of accounting. At certain universities so few accountants graduate that the staff could utilise their talents to improve the standard of graduates and to help with research.

The question has been posed whether the accountancy profession in South Africa should take over the last year of accountancy education. It has been suggested that the profession establish its own college to concentrate on the professional aspects of the future accountant's education and training. It is recommended that the teaching of the future chartered accountant be done by the universities. It is acknowledged that the teaching at universities is not perfect, but it has served the profession well for more than two decades. If anything, the teaching has been too professionally oriented. There have been misgivings in certain regions about the teaching at universities, but most departments of accounting do encounter staffing problems at some stage or another. Liaison between the profession and academics is essential and practitioners could assist with teaching the more professionally oriented subjects on a modular basis.

The present system, it is submitted, is educationally preferable to a block-release system, because students have constant contact with their lecturers. Block-release courses could be described as cram courses, although its advocates deny this. Staffing of a professional school run by the profession will be problematical. Geographical factors mitigate against the introduction of such a school. The universities should maintain a balance between concepts and techniques and problems in certain regions will no doubt be overcome.

Universities could develop their own image in many ways. A very interesting school of accountancy within a university is that of the University of New South Wales. There are four departments within the school of accountancy, which plays a major role in the formulation of all the courses. A school of accountancy within a university environment would ensure that the members of faculty would have, subject to the
proper staffing ratio, broad interests, which could ensure that whereas certain members would concentrate on the research of accounting theory, other members of faculty could concentrate on the more professionally oriented subjects. It is suggested that one or two universities could endeavour to build up a reputation for specialities, utilising a sandwich arrangement or co-operative programme similar to those found in America and Canada.\(^\text{10}\) It is suggested that a sandwich arrangement whereby the student could attend lectures for six months and then work with a firm of accountants for at least five months, would ensure that the student is exposed to theory as well as applications thereof. At the same time certain universities could build up a reputation for having above-average expertise in the field of computers, or the degree may be structured in such a way that a student could decide to major in statistics. With regard to the educational content it is suggested that there be a de-emphasis of techniques at some universities, and that a happy medium, hopefully be struck with regard to the teaching of theory and the teaching procedures at universities. It is imperative that the student be encouraged to read much more, and this can only be done if theoretical questions, covering controversies in the field of accounting and related fields, are set in the examinations.

Staffing at some universities is problematical and it is submitted that for a proper education it is necessary to have two-way communication between members of faculty and students. This would need discussion groups which, to be effective, must not have more than 25 members. It is suggested, with relation to the professionally-oriented subjects, that the universities utilise the "big-eight" and large national firms' staff so that two members per group could assist with the discussion. It is submitted that this would not be a difficult task if the programme was properly co-ordinated and if members of faculty would move from group to group. The second member of the profession could record his impressions of the answers given by the various members of the discussion group. With regard to members of faculty,

\(^{10}\) For detailed discussion of the Canadian approach see pp. 95, 96, 97/101.
it is suggested that those teaching professionally-oriented subjects do "internships" at large firms for at least three months continuously every two years. This is necessary to ensure that the lecturers remain in contact with the latest developments in the profession. An alternative suggestion may be for the professionally-oriented subjects at the advanced level to be taught on a modular basis by those members of the profession who have the expertise, that is if the university does not have the expertise in its own department.

It is recommended that members of faculty be encouraged to lecture at overseas universities for periods of six months so that they may benefit from discussions with overseas colleagues.

To facilitate staffing of departments in the future, it is necessary that the brighter student be offered the opportunity of doing an honours course on a full-time basis, and as this is a four-year full-time course, it is suggested that the practical-experience requirement be reduced to two years. It is suggested that as these students would have much greater exposure to accounting theory through the honours course, this additional remission be granted so as to shorten the period required to qualify for the C.A. qualification.

It is proposed that members of faculty who teach at university be members of the profession.

It is important to bear in mind that the universities are not educating accountants solely for the chartered accountancy profession. In the devising of courses this factor should be borne in mind and it is submitted that if the format of the final qualifying examination is changed, the last two years of a student's education should allow either for a modular or a semester approach which should give the student sufficient choice of modules in which he could take optional courses. The taking of these optional subjects will by no means make a specialist out of the student but he should be encouraged to extend his knowledge of a subject for which he has an aptitude. It is not
recommended that there be streaming in the examination as it is felt that all chartered accountants should have the same uniform qualifying examination.

The universities in consultation with the profession, to determine the needs of the profession, should be encouraged to develop post-graduate specialist courses. Whether these are post-graduate or diploma courses would obviously depend on the nature of the course. It is further recommended that universities develop short modular refresher courses to promote the ever increasing importance of continuing education. It is suggested that this be done in liaison, with the profession through the regional associations, which could have trust funds to enable academics with the necessary ability to travel abroad to gain experience.

16.8 Entry Requirements at University

The ideal entry requirement in a utopian situation would be graduates only. There can be no doubt of the desirability of graduate entry being the minimum requirement, but unfortunately statistics indicate that this situation is a long way off. It is suggested that the universities have more rigorous courses and that the profession be encouraged to employ graduates only. From the available statistics it is seen that the profession is getting a small share of the total number of commerce graduates in South Africa. A public relations officer is essential to attract more of the commerce graduates, who may not necessarily have majored in accounting, but who would have at least done one or two courses. As mentioned in the discussion about the Accounting Development Foundation, if the profession is positive and sells its own profession to its members, a substantial trust fund could be developed to offer bursaries and scholarships. Individual firms could create their own bursary funds for students. If many bursaries were available, the brighter students could be attracted to the

11) For a detailed discussion see pp. 278/283
profession. Graduates have greater maturity and they have proved their endurance by completing a university course. This is subject to the caveat that the universities will ensure proper standards.

It is doubtful whether graduate entry will be acceptable in the present economic environment. Initially, it is therefore suggested that the following minimum requirements be expected at matriculation level: mathematics at higher grade - 40%, mathematics at lower grade - 50%, both languages - a mark of 40%. The importance of communication in the profession cannot be stressed sufficiently. The required minimum matriculation aggregate should be increased to 50%.

It is submitted that these standards are not stringent enough, but in order not to prejudice the chances of a school leaver because of factors beyond his control, a certain provisional registration should be allowed. It is generally known that many schools have problems in staffing their mathematics departments and finding suitable language teachers. It is therefore suggested that the avenue of part-time study be left open to students who did not comply with the above-mentioned requirements but who have a minimum of 40% in mathematics at standard grade and 33 1/3% at mathematics higher grade. Registration of articles should be conditional upon them successfully completing their first year at university. The students who pass the examination under such conditions, should be allowed to continue their studies.

The ultimate aim of the profession must be graduate entry within the next five to ten years. It is submitted that this could be done. This would improve the image of the profession and possibly attract the brighter student.

The period of the practical-experience requirement should be restructured in the following manner: Bachelor of Commerce (Honours) graduates on a full-time basis should be required to do two years practical experience. Bachelors of Commerce graduates without any practical experience during the course, should have three years. Non-relevant graduates
should have three years. Graduates of universities presenting co-operative or internship courses should be given a remission, depending on the practical experience undergone during their full-time study. It is suggested that the school leavers' practical experience be left at five years. No recommendation has been made for one or two years full-time study because if the profession moves to full-time study it is submitted that graduate entry be its aim.

16.9 The Common Body of Knowledge

It is recommended that the common body of knowledge be given in broad outline only, but approval of universities be on a stricter basis. Detailed contents of the common body of knowledge should be left to university academics. This could allow for inclusion of various aspects, which could be regarded by the profession as being irrelevant, such as human resources accounting, and the effects of the environment on accountability of large companies. It is necessary that there be liaison between universities and the profession without the one dominating the other. With regard to the common body of knowledge, it is submitted that in the past there has been too much emphasis on certain subjects such as accounting, auditing, law, and a de-emphasis of these subjects within certain limits should be considered, with a more management-oriented approach being utilised. It is recommended that changes to the common body of knowledge should be effected more expeditiously than is presently the case. Therefore any amendments to the common body of knowledge gazetted prior to the 30th day of June in each year, may be included in the final qualifying examination of the following year.

12) For a detailed discussion see pp. 316/340.
13) See Annexure H for selected extracts from the syllabi of various accounting institutes, which reveal a contrast in approach.
16.10 Structure of Qualifications within the Profession

It must be recognised that not all accountants require the same level of competence, and it is therefore recommended that the profession take an active role in promoting the formation of a professional body of accounting technicians. It must be stressed that this professional body will cater for those candidates who do not have the necessary entry requirements for the profession, and must not therefore be associated with possible candidates who have complied with the requirements of the Certificate in the Theory of Accountancy, but have failed the Final Qualifying Examination of the Public Accountants' and Auditors' Board. This is not the purpose of the envisaged lower tier. It is further recommended that those members of this profession, who successfully complete their examinations with an average of 60% should be allowed the facility of entering the profession. It is further recommended that this education be taken at the colleges for advanced technical education, and should these members wish to enter the chartered accountancy profession, having complied with the necessary entry, namely 60% in the lower tier examination, the universities should provide a diploma allowing them to qualify as chartered accountants. This professional body would allow for practical experience to be undertaken in various types of organisation, such as banks, insurance companies, commerce, industry or the accountancy profession.

An important justification for such a lower tier is to give an identity and status to the technician. The creation of a lower tier should assist commerce and industry as well as the public accountancy profession. With regard to the latter, the technician could assist with certain routine tasks, in smaller and medium-sized practices.

14) For detailed discussion see pp. 303/315.
16.11 Required Continuing Education

One of the major arguments against a required continuing education programme is that the market place determines who has the necessary competence. It is submitted that this argument is valid up to a point, but the question that is of utmost importance is whether the profession can afford a further loss of image through the actions of a minority of members, who are possibly damaging the profession through their ignorance.

As stated above, the universities are to be encouraged to create short modular courses to assist the profession in providing continuing education courses. This should be done in liaison with regional associations so that a trust fund could be established in which surpluses could be placed. These surpluses could be utilised by universities for further research. The profession itself should endeavour to create more continuing education courses utilising the expertise of the larger firms and adapting courses if necessary.

It is not envisaged that continuing education should be made mandatory for at least a period of five years. However it is recommended that the Public Accountants' and Auditors' Act should be changed, requiring all practising chartered accountants registered with the Public Accountants' and Auditors' Board to submit details annually of their continuing education. It may be argued that this is a psychological approach and that members would attend courses fearing a mandatory requirement. In view of the fact that the competence of a member is so important to the profession as a whole, it is suggested that once the infrastructure for a continuing education programme has been created, a required continuing education programme be instituted.

It is recommended that the profession create the necessary machinery similar to that of the American Institute of Certified Public Accountants so that South African chartered

15) For a detailed discussion see pp.359/393.
accountants can review the quality of their auditing assignments. It is submitted that a quality review programme will be of invaluable assistance to the small and medium-sized practices.  

16.12 Conclusion

In planning for the future it is necessary that the profession state its priorities in a clear and unequivocal manner. It is submitted for a profession to plan for the future properly, it is a matter of urgency that there be rationalisation of the controlling bodies which will ensure a streamlining of the decision-making process. If this rationalisation is accomplished, it is submitted that implementation of various recommendations and decisions by the profession will be much quicker. It is important for the profession to control the quality of experience, and with regard to the image of the profession it is necessary that the profession define auditing standards and accounting principles, or in terms of the Companies Act, accounting practices, so that the profession's image may be enhanced. The future of accountancy education is seen as follows:

"Conformity of approach to accountancy education can only lead to stultification, diversity of approach can only be beneficial to the profession in the long run and a cross fertilisation of ideas may thus result. Experimentation in education is desirable and tolerance is required of all concerned. Expediency must not be the sole criterion by which the effectiveness of accountancy education is judged. In determining the future of accountancy educational requirements, it is very important to bear in mind that the end product must not be a 'glorified bookkeeper' but a thinking accountant who has the necessary skills and techniques to evaluate critically and solve complex problems."  

16) For a detailed discussion see pp. 367/373.

In the final analysis it may be stated that the profession must not lose sight of its responsibilities to the public and in the policy making of the profession it is imperative that public interest be recognised. To maintain its image and its right to existence as an independent profession, it is submitted that the profession recognise that the public interest is of paramount importance.
PART VI

ANNEXURES AND BIBLIOGRAPHY
INSTRUCTIONS FOR COMPLETION OF QUESTIONNAIRE

1. Kindly complete and return questionnaire in the enclosed envelope not later than 30th September 1975.
2. Accountants and auditors in public practice and those employed therein: Kindly complete sections A, B, C and E.
3. Accountants not in public practice, with the exception of university teachers of accountancy and retired accountants: Kindly complete sections A, B, D and E.
4. University teachers of accountancy and retired accountants: Kindly complete sections A and B.
5. Written submissions on any aspects of accountancy education will be appreciated and should be submitted to: C.A. (S.A.), P.O. Box 964, Johannesburg. 2000

Complete questionnaire by inserting figures or ticks where appropriate.

SECTION A.

TO BE COMPLETED BY ALL RESPONDENTS

1. Present age □ 1. a. When did you qualify as a Chartered Accountant? □ 19 □

2. City or town and province where presently employed:
   Cape Province □ Natal □ Orange Free State □ Transvaal □ Rhodesia □ South West Africa □
   Other □

3. Do you have a university degree? Yes □ No □
   If yes, please specify-
   DEGREE
   YEAR ATTAINED
   UNIVERSITY
   FULL-TIME (F), PART-TIME (P) or CORRESPONDENCE (C)

4. Have you completed any post-qualification specialisation at: university, another institution or through personal incentive? Yes □ No □
   If yes, kindly indicate area of specialisation:
   Data Processing □ Estate Planning □ Management Accounting □ Taxation □
   Other (please specify)
   QUALIFICATION (if any)
   YEAR ATTAINED
   UNIVERSITY OR INSTITUTION
   FULL-TIME (F), PART-TIME (P) or CORRESPONDENCE (C)

5. If you are employed indicate your annual income range. If you are in practice indicate your total earnings i.e. salary, share of profits, interest received on capital account and deduct interest at 12% p.a. on capital account.
   Below R10000 □ R10001 to R15000 □ R15001 to R20000 □ R20001 to R25000 □ R25001 to R30000 □
   R30001 to R35000 □ Above R35000 □

6. Present Occupation (TICK ONLY ONE BLOCK)
   a) Commerce and Industry □ b) Consultancy □ c) Education □ d) Finance □ e) Public Practice □
   f) Retired □ g) Other □

SECTION B.

TO BE ANSWERED BY ALL RESPONDENTS

PRE-QUALIFICATION TRAINING AND EDUCATION

7. Indicate which of the statements made below is most acceptable to you: (TICK ONLY ONE BLOCK)
   a) All prospective Chartered Accountants must undergo some period of supervised practical experience (articles) in a practitioner's office prior to qualification. □
   b) Prospective Chartered Accountants wishing to enter public practice must undergo some period of supervised practical experience (articles) prior to qualification. □
   c) Practical experience is not required of the prospective Chartered Accountant. □
   d) Prospective Chartered Accountants should, prior to qualification, either undergo a period of supervised practical experience in a practitioner's office or combine experience in a practitioner's office with a period in commerce and industry. □
   e) Other: (please specify)

8. Assuming that a supervised practical experience period prior to qualification is required, should this be:
   a) under the present system of articles. □
   b) or a service contract with free transferability. □
   c) or other- (please specify) □

9. Are you in favour of making a university degree a pre-requisite to the commencement of the supervised practical experience period (articles)? Yes □ No □
10. Indicate which of the statements made below is most acceptable to you: (Tick only one block)
   a) Approved universities should have the power to examine prospective entrants to the profession without the Public Accountants' and Auditors' Board setting a subsequent final examination.
   b) Approved universities should have the power to examine prospective entrants to the profession, but the Public Accountants' and Auditors' Board should set an examination for those desiring practising certificates.
   c) The Public Accountants' and Auditors' Board should set an examination for all prospective Chartered Accountants.
   d) Other - (please specify).

11. In the event of universities agreeing to set a uniform final examination in lieu of the Certificate in the Theory of Accountancy, indicate which statement is most acceptable to you: (Tick only one block)
   a) That no further examination whatsoever be set by the Public Accountants' and Auditors' Board and the designation C.A. (S.A.) be used upon registration with one of the provincial societies.
   b) That the Public Accountants' and Auditors' Board should set an examination for those desiring practising certificates, and this examination to be written during the last year of the practical experience period and the C.A. (S.A.) designation may be used upon registration with one of the provincial societies.
   c) That the Public Accountants' and Auditors' Board should set an examination for all prospective Chartered Accountants.
   d) Other - (please specify).

12. Should the future accountant be exposed to a broader education allowing for additional optional subjects such as philosophy, psychology, sociology etc. Yes □ No □

13. Indicate whether the future accountant should have greater exposure to university education in the topics detailed below:
   a) Financial Management
   b) Management and related business topics
   c) Quantitative techniques
   d) Computers: (i) Elementary programming
   (ii) Detailed programming
   (iii) Systems design
   (iv) Audit and control features
   (v) Other - (please specify)

14. Should the subjects prescribed for a student's academic education allow for certain options, depending on whether he intends entering into public practice or one of the other fields? Yes □ No □

15. Do you consider the present system of part-time attendance at university satisfactory? Yes □ No □

16. Should some system of block release be introduced? Yes □ No □ If yes, indicate your preference:
   a) lectures to commence at 14h00 one afternoon per week in addition to part-time lectures.
   b) trainee accountants to be released one day a week.
   c) other - (please specify)

POST-QUALIFICATION EXPERIENCE

17. Should there be any requirements to acquire approved post-qualification experience with a practitioner before a member may be authorised to practise under his own name? Yes □ No □

18. If your answer to question 17 is yes, what should the period of post-qualification practical experience be?
   a) 12 months □ b) 18 months □ c) 24 months □ d) other □

19. In the event of post-qualification practical experience becoming mandatory before a person may be registered as a practising accountant, should the requirement be waived in the event of a C.A. being admitted into partnership by another practitioner? Yes □ No □

STRUCTURE OF THE PROFESSION

20. How do you envisage the structure of the profession 10 years hence? (Tick only one block)
   a) As presently structured, consisting of C.A.'s, either practising or non-practising.
   b) or the present C.A. together with a lower tier, possibly a "technician" grade.
   c) or a two-tier structure, the present C.A. together with a higher "specialist" tier.
   d) or a multi-tier structure, the present C.A. together with a "specialist" tier as well as a "technician" grade.
   e) or other
21. How do you envisage the structure of the controlling bodies (or organisations) of the profession 10 years hence? (TICK ONLY ONE BLOCK)
   a) As presently structured, consisting of the Public Accountants' and Auditors' Board, The National Council of Chartered Accountants (S.A.), provincial societies and regional associations.
   b) The Public Accountants' and Auditors' Board, a national society of Chartered Accountants (S.A.) and regional associations.
   c) One national statutory controlling body together with regional associations.
   d) Other - (please specify).

   CONTINUING EDUCATION
22. Should professionally qualified persons (note: not only accountants) periodically give proof of competence (TICK ONLY ONE BLOCK)
   a) by successfully writing examinations every 5 years?
   b) by attending a prescribed number of approved courses every 2 or 3 years?
   c) not at all?

23. If continuing education were to become mandatory for Chartered Accountants, should C.A.'s not in public practice be exempt from this requirement? Yes □ No □

24. How many days (7 hours per day) during the last three years have you spent in attendance at courses presented by:
   a) The National Council of Chartered Accountants (S.A.)...
   b) Universities...
   c) In-office...
   d) Other institutions...
   
   (Note: Attendance at vacation schools and congresses to be excluded from the above)

25. Should the auditor accept greater responsibility by the attest function being extended to include an opinion on the following: Yes □ No □
   a) Half-yearly financial statements
   b) Annual and other profit forecasts including underlying assumptions
   c) Management effectiveness

26. Should the financial statements of small private (but not subsidiary) companies, whose assets do not exceed a certain amount eg. R50000 or R100000 and if all the shareholders agree thereto, still be audited? Yes □ No □

SECTION G.

27. Your present position in the profession:
   a) a principal for less than 5 years □
   b) a principal for 5 to 10 years □
   c) a principal for over 10 years □
   d) employee in a practitioner's office □

28. Number of active partners and qualified employees in
   the firm nationally
   Your local office

29. Does your firm or employer have an association with an overseas firm of accountants? Yes □ No □

30. In the event of the profession playing a greater role in pre-qualification academic accountancy education, would you be prepared to lecture or assist as a tutor on a part-time basis? Yes □ No □

   If yes, indicate your specialities
31. Which of the following do you personally carry out? Please apportion your time on a broad percentage basis to the nearest 10%  

<table>
<thead>
<tr>
<th>Activity</th>
<th>1975</th>
<th>1972</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditing</td>
<td></td>
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<tr>
<td>Accounting</td>
<td></td>
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<tr>
<td>Tax work</td>
<td></td>
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<tr>
<td>Management advisory services: Electronic Data Processing</td>
<td></td>
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<tr>
<td>Management Information Systems</td>
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<tr>
<td>Other</td>
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<tr>
<td>Secretarial work</td>
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<tr>
<td>Share transfer work</td>
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<tr>
<td>Administration of estates</td>
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<td>Estate planning</td>
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<tr>
<td>Practice administration</td>
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<td>Company directorships</td>
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<td>Investigations</td>
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<td>Liquidations and Judicial Managements</td>
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<td>Other</td>
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100% 100%

SECTION D.

TO BE COMPLETED BY CHARTERED ACCOUNTANTS NOT IN PUBLIC PRACTICE, WITH THE EXCEPTION OF UNIVERSITY TEACHERS OF ACCOUNTANCY AND RETIRED ACCOUNTANTS.

32. Classify your main activity in your present employment (TICK ONE BLOCK ONLY)
   General management and administration □  Marketing □  Personnel □  Finance □  Accounting □
   Data processing □  Other (please specify) □

33. Indicate the designation of your present position:
   Executive Director □  Non-executive Director □  Managing Director □  Company Secretary □
   Chief Accountant/Financial Controller □  Accountant □  Other (please specify) □

34. How many years did you spend in a practitioner's office after qualifying as a C.A., before going into commerce or industry? □ years

35. Are any of the following used as aids to the accounting function in any department under your immediate control:
   a) Mechanical accounting machines. □  Yes □  No
   b) Mini-computers... □  Yes □  No
   c) Computer installations........... □
   d) Computer bureau ... □
   e) Visual record computers........... □

36. Indicate whether the use of modern mathematical techniques in your firm has increased, remained constant or decreased compared to 3 years ago. Increased □  Same □  Decreased □

37. Do you consider that the experience gained during your practical experience period (articles) has been of assistance to you in your present career? Yes □  No □

SECTION E.

To be completed by all respondents with the exception of university teachers of accountancy and retired accountants.

Indicate opposite each topic listed below its relevant importance in your present work by inserting a tick in the appropriate rating column. Indicate also whether you expect the importance of the topic to be less, the same, or more important 10 years hence.

If the meaning of a topic is not clearly understood, please indicate as such in the relevant column and leave the importance thereof 10 years hence blank.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Present Work - Importance</th>
<th>10 Years Henc e</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Accounting in relation to changes in purchasing power</td>
<td></td>
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<tr>
<td>2. Accounting for trusts or estates</td>
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<td>3. Accounting for specialised undertakings e.g., banks, co-ops, mines etc.</td>
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<td>4. Audit of E.D.F. systems</td>
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<td>5. Behavioral sciences</td>
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<td>6. Budgetary Control</td>
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<tr>
<td>7. Communication (written and spoken)</td>
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<tr>
<td>8. Computer programming</td>
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<table>
<thead>
<tr>
<th>Topic</th>
<th>Present Work - Importance</th>
<th>ANNEXURE A.5 10 YEARS HENCE</th>
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<tbody>
<tr>
<td>9. Consolidations</td>
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<tr>
<td>10. Corporate Policy</td>
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<td>11. Corporate Finance</td>
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<td>12. Cost-benefit Analysis</td>
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<td>13. Economics</td>
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<td>14. Electronic Data Processing</td>
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<tr>
<td>15. Farming Accounts</td>
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<tr>
<td>16. Financial Ratio Analysis</td>
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<td>17. Forecasting</td>
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<td>18. Foreign Exchange</td>
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<td>19. Humanities</td>
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<td>20. Income Tax - Companies</td>
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<td>21. Individuals</td>
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<td>22. Insolvencies and Liquidations</td>
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<td>23. Internal Control Evaluation</td>
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<td>24. Inventory Control</td>
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<td>25. Investigations</td>
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<td>26. Investment Appraisal Techniques</td>
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<td>27. Job Costing</td>
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<td>28. Law: Company -</td>
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<td>29. - of Contract</td>
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<td>30. - of Partnerships</td>
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<td>31. - of Negotiable Instruments</td>
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<td>32. Management Audit</td>
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<td>33. Management Information Systems</td>
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<td>34. Marginal Costing</td>
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<td>35. Marketing</td>
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<td>36. Mathematical Models</td>
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<td>37. Office Management</td>
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<td>38. Organisation Theory</td>
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<td>39. Partnership Accounts</td>
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<td>40. Pert-cost and Network Analysis</td>
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<td>41. Portfolio Selection and Management</td>
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<td>42. Probability Analysis</td>
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<td>43. Process Costing</td>
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<td>44. Product Pricing</td>
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<td>45. Production Control</td>
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<td>46. Profit Planning</td>
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<td>47. Public Practice Management</td>
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<td>48. Regression Analysis</td>
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<td>49. Sampling Techniques</td>
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<td>50. Simulation</td>
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<td>51. Small Business Accounts and Audit</td>
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<td>52. Staff Training and Development</td>
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<td>53. Standard Costing</td>
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<td>54. Statistical Analysis</td>
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<td>55. Tax and Estate Planning</td>
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<tr>
<td>56. Valuation of Shares and Businesses</td>
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<tr>
<td>57. Verification of Assets and Liabilities</td>
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</table>

Kindly detail below topics of above average importance in your present work, which have been omitted from the above.

.............................................................................................................................................
.............................................................................................................................................
.............................................................................................................................................
29 August 1975

Dear Member,

It is now nearly 10 years since the profession last had a good look at education.

As this is a subject of prime importance, National Council has appointed Professor B S Wolman to take a hard and close look at education and training in its broadest sense, i.e. both pre-qualifying and post-qualifying.

Professor Wolman has already visited various countries and is at present busy with research concerning South African conditions. For this purpose he needs well-considered replies to the enclosed questionnaire.

Please complete the questionnaire and return it in the enclosed envelope as soon as possible.

Yours sincerely,

W H KRUGER
Executive Director

The above letter was sent together with the questionnaires distributed by The Transvaal Society of Chartered Accountants.
The Orange Free State Society of Chartered Accountants

SECRETARY: F.B. GOUWS
TELEPHONE NO. 78230
P.O. BOX NO. 408
TELEGRAPHIC ADDRESS: "AUDIT"

24th September, 1975.

75 MAITLAND STREET,
BLOEMFONTEIN,
O.F.S.

SURVEY OF TRAINING AND EDUCATIONAL REQUIREMENTS

Professor B.S. Wolman, a Chartered Accountant (S.A.) of the Department of Accountancy at the Pretoria University is preparing a thesis on the accounting profession in South Africa for his doctorate. As it is nearly 10 years since the profession last examined in some depth the question of the training and educational requirements of the profession, National Council and the Board have agreed to sponsor Professor Wolman and have asked him in his study to embrace the requirements until 1990.

The Professor who has visited various countries already is busy at present with research concerning South African conditions, and in this connection he has prepared the enclosed questionnaire. Members may have difficulty in answering some of the questions and if they are unable to give considered replies, it would be preferable to give no answer at all to avoid the gathering of misleading information. It will assist Professor Wolman if members will find the time to complete the questionnaire to the best of their ability and return it by 24th October, 1975 to:-

C.A. (S.A.),
P.O. Box 964,
JOHANNESBURG.
2000

F.B. GOUWS
SECRETARY

Wording similar to that of the above letter, was used in the covering letters sent with the questionnaires distributed by The Cape Society of Chartered Accountants and The Natal Society of Chartered Accountants.
### PERCENTAL CLASSIFICATION ACCORDING TO OCCUPATION

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Total number of responses</td>
<td>100,0%</td>
</tr>
<tr>
<td>Chartered Accountants in Public Practice</td>
<td>47,7%</td>
</tr>
<tr>
<td>Principal: for less than 5 years</td>
<td>12,0%</td>
</tr>
<tr>
<td>5 to 10 years</td>
<td>8,8%</td>
</tr>
<tr>
<td>over 10 years</td>
<td>18,1%</td>
</tr>
<tr>
<td>Employee in public practice</td>
<td>8,8%</td>
</tr>
<tr>
<td>Chartered Accountants not in Public Practice</td>
<td>52,3%</td>
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<tr>
<td>Retired</td>
<td>2,4%</td>
</tr>
<tr>
<td>Academics</td>
<td>2,5%</td>
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<tr>
<td>Chartered Accountants in other categories</td>
<td>47,4%</td>
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<tr>
<td>Commerce and industry</td>
<td>38,3%</td>
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<tr>
<td>Consultancy</td>
<td>1,0%</td>
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<tr>
<td>Finance</td>
<td>6,1%</td>
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<tr>
<td>Other</td>
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### PERCENTAL ANALYSIS OF AGE OF RESPONDENTS ACCORDING TO OCCUPATION CLASSIFICATION

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<thead>
<tr>
<th>Category</th>
<th>Number of Responses</th>
<th>Below 31 years</th>
<th>31 - 40 years</th>
<th>41 - 55 years</th>
<th>Above 55 years</th>
<th>100%</th>
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<td>Commerce</td>
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<td>21,6</td>
<td>42,9</td>
<td>29,4</td>
<td>6,1</td>
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<td>Consultancy</td>
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<td>8,3</td>
<td>33,3</td>
<td>29,2</td>
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<td>31,7</td>
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<td>Finance</td>
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<td>22,9</td>
<td>39,6</td>
<td>31,9</td>
<td>5,6</td>
<td>100,0%</td>
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<td>Public Practice: Principal - less than 5 years</td>
<td>285</td>
<td>41,4</td>
<td>49,1</td>
<td>8,4</td>
<td>1,1</td>
<td>100,0%</td>
</tr>
<tr>
<td>5 to 10 years</td>
<td>209</td>
<td>5,7</td>
<td>69,9</td>
<td>21,5</td>
<td>2,9</td>
<td>100,0%</td>
</tr>
<tr>
<td>more than 10 years</td>
<td>428</td>
<td>0,0</td>
<td>17,1</td>
<td>53,5</td>
<td>29,4</td>
<td>100,0%</td>
</tr>
<tr>
<td>Employee</td>
<td>208</td>
<td>67,8</td>
<td>21,6</td>
<td>6,3</td>
<td>4,3</td>
<td>100,0%</td>
</tr>
<tr>
<td>Retired</td>
<td>58</td>
<td>0,0</td>
<td>0,0</td>
<td>8,6</td>
<td>91,4</td>
<td>100,0%</td>
</tr>
<tr>
<td>Other</td>
<td>48</td>
<td>18,7</td>
<td>14,6</td>
<td>50,0</td>
<td>16,7</td>
<td>100,0%</td>
</tr>
<tr>
<td>TOTAL RESPONSES</td>
<td>2 373</td>
<td>22,1</td>
<td>37,7</td>
<td>28,6</td>
<td>11,6</td>
<td>100,0%</td>
</tr>
</tbody>
</table>
### ANNEXURE B.2

**PERCENTAL ANALYSIS OF respondents According to Year when C A Qualification Attained**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of Responses</th>
<th>Before 1952</th>
<th>1952 to 1960</th>
<th>1961 to 1970</th>
<th>After 1970</th>
<th>Year not indicated</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Practice</td>
<td>1130</td>
<td>21.3</td>
<td>18.4</td>
<td>34.5</td>
<td>25.7</td>
<td>0.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Education</td>
<td>60</td>
<td>6.7</td>
<td>26.7</td>
<td>38.3</td>
<td>28.3</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Retired</td>
<td>58</td>
<td>96.6</td>
<td>1.7</td>
<td>1.7</td>
<td>0.0</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Commerce etc.</td>
<td>1125</td>
<td>19.3</td>
<td>21.2</td>
<td>40.5</td>
<td>18.8</td>
<td>0.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Number of Responses</th>
<th>Before 1952</th>
<th>1952 to 1960</th>
<th>1961 to 1970</th>
<th>After 1970</th>
<th>Year not indicated</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 31 years</td>
<td>525</td>
<td>0.0</td>
<td>0.0</td>
<td>20.9</td>
<td>78.5</td>
<td>0.6</td>
<td>100.0</td>
</tr>
<tr>
<td>31 - 40 years</td>
<td>893</td>
<td>0.0</td>
<td>14.7</td>
<td>74.2</td>
<td>11.1</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>41 - 55 years</td>
<td>679</td>
<td>18.6</td>
<td>46.7</td>
<td>13.2</td>
<td>1.4</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Above 55 years</td>
<td>276</td>
<td>52.8</td>
<td>5.4</td>
<td>13.8</td>
<td>0.0</td>
<td>0.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Degree or No Degree</th>
<th>Number of Responses</th>
<th>Before 1952</th>
<th>1952 to 1960</th>
<th>1961 to 1970</th>
<th>After 1970</th>
<th>Year not indicated</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
<td>718</td>
<td>17.2</td>
<td>16.0</td>
<td>33.0</td>
<td>33.7</td>
<td>0.1</td>
<td>100.0</td>
</tr>
<tr>
<td>No Degree</td>
<td>1655</td>
<td>23.9</td>
<td>21.1</td>
<td>38.1</td>
<td>16.8</td>
<td>0.1</td>
<td>100.0</td>
</tr>
</tbody>
</table>

### PERCENTAL ANALYSIS OF respondents According to Region Where Employed

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of Responses</th>
<th>Cape Province</th>
<th>Natal</th>
<th>Orange Free State</th>
<th>Transvaal</th>
<th>Others &amp; Indicated</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Practice</td>
<td>1130</td>
<td>22.7</td>
<td>18.4</td>
<td>4.2</td>
<td>54.0</td>
<td>0.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Education</td>
<td>60</td>
<td>28.3</td>
<td>15.0</td>
<td>1.7</td>
<td>53.3</td>
<td>1.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Retired</td>
<td>58</td>
<td>24.1</td>
<td>15.5</td>
<td>2.5</td>
<td>56.9</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Commerce etc.</td>
<td>1125</td>
<td>19.3</td>
<td>14.6</td>
<td>0.7</td>
<td>64.0</td>
<td>1.1</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Number of Responses</th>
<th>Cape Province</th>
<th>Natal</th>
<th>Orange Free State</th>
<th>Transvaal</th>
<th>Others &amp; Indicated</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 31 years</td>
<td>525</td>
<td>19.6</td>
<td>19.0</td>
<td>1.0</td>
<td>60.2</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>31 - 40 years</td>
<td>893</td>
<td>19.7</td>
<td>15.0</td>
<td>3.0</td>
<td>61.7</td>
<td>0.5</td>
<td>100.0</td>
</tr>
<tr>
<td>41 - 55 years</td>
<td>679</td>
<td>23.9</td>
<td>16.9</td>
<td>2.7</td>
<td>54.3</td>
<td>2.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Above 55 years</td>
<td>276</td>
<td>23.2</td>
<td>14.9</td>
<td>2.9</td>
<td>57.6</td>
<td>1.4</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Degree or No Degree</th>
<th>Number of Responses</th>
<th>Cape Province</th>
<th>Natal</th>
<th>Orange Free State</th>
<th>Transvaal</th>
<th>Others &amp; Indicated</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
<td>718</td>
<td>21.6</td>
<td>9.6</td>
<td>2.8</td>
<td>65.8</td>
<td>0.1</td>
<td>100.0</td>
</tr>
<tr>
<td>No Degree</td>
<td>1655</td>
<td>21.1</td>
<td>19.4</td>
<td>2.3</td>
<td>55.8</td>
<td>1.3</td>
<td>100.0</td>
</tr>
</tbody>
</table>
### Breakdown of Respondents with Degrees according to Occupation Classification

<table>
<thead>
<tr>
<th>Public Practice:</th>
<th>Percentage of Total Responses</th>
<th>Percentage in each Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Degree</td>
<td>No Degree</td>
</tr>
<tr>
<td>Principal - less than 5 years</td>
<td>4.8</td>
<td>7.2</td>
</tr>
<tr>
<td>5 to 10 Years</td>
<td>2.5</td>
<td>6.3</td>
</tr>
<tr>
<td>more than 10 years</td>
<td>4.4</td>
<td>13.6</td>
</tr>
<tr>
<td>Employee</td>
<td>3.0</td>
<td>5.8</td>
</tr>
<tr>
<td>Commerce, Industry and Consultancy</td>
<td>9.5</td>
<td>29.8</td>
</tr>
<tr>
<td>Finance</td>
<td>2.5</td>
<td>3.6</td>
</tr>
<tr>
<td>Other</td>
<td>0.8</td>
<td>1.7</td>
</tr>
<tr>
<td>Education</td>
<td>2.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Retired</td>
<td>0.8</td>
<td>1.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30.3</td>
<td>69.7</td>
</tr>
</tbody>
</table>

### Type of Degree (based on 718 replies)

1. B.Com. | 70.0
2. B.Com.(Hons.), B.Compt., B.Acc. | 7.8
3. B.Com., M.B.A. | 2.5
4. M.B.A. | 2.5
5. B.A./B.Com., LL.B. | 1.0
6. B.A. | 2.5
7. B.Sc. | 1.7
8. M.Com. | 8.1
9. Other | 3.9
**Total** | 100.0%

### Manner of Study (based on 710 replies)

1. Full-time | 53.1
2. Part-time | 26.8
3. Correspondence | 8.3
4. Full-time and part-time | 9.4
5. Full-time, part-time and correspondence | 2.4
**Total** | 100.0%
**ANALYSIS OF RESPONSES TO QUESTION 4**

**Post-Qualification Specialisation (Based on 2 367 replies)**

| Yes | 15,1 |
| No  | 84,9 |
| **Total** | **100,0%** |

**Field of Specialisation (based on 358 replies)**

<table>
<thead>
<tr>
<th>Field of Specialisation</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Processing</td>
<td>19,8</td>
</tr>
<tr>
<td>Estate Planning</td>
<td>7,0</td>
</tr>
<tr>
<td>Management Accounting</td>
<td>42,7</td>
</tr>
<tr>
<td>Taxation</td>
<td>7,3</td>
</tr>
<tr>
<td>Data Processing and Management Accounting</td>
<td>3,1</td>
</tr>
<tr>
<td>Taxation and Management Accounting</td>
<td>1,4</td>
</tr>
<tr>
<td>Marketing</td>
<td>0,8</td>
</tr>
<tr>
<td>Other</td>
<td>17,9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100,0%</strong></td>
</tr>
</tbody>
</table>

(Other fields of specialisation include: Banking, Financial Management, Information Systems, Insolvency, Personnel Management, Production, Property Development, Secretarial, Stock Exchange).

**Breakdown of Specialisation Qualifications (based on 165 replies)**

<table>
<thead>
<tr>
<th>Qualifications</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.W.A. (C.M.A.)</td>
<td>69,7</td>
</tr>
<tr>
<td>Management Qualifications</td>
<td>6,7</td>
</tr>
<tr>
<td>Computer</td>
<td>4,2</td>
</tr>
<tr>
<td>Taxation</td>
<td>7,9</td>
</tr>
<tr>
<td>Other</td>
<td>11,5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100,0%</strong></td>
</tr>
</tbody>
</table>

Many respondents indicated post-qualification specialisation fields, without having attained a formal qualification. This accounts for the difference between the 358 and 165 replies indicated above.

**How Post-Qualification Specialisation Attained (based on 276 replies)**

<table>
<thead>
<tr>
<th>Attainment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>11,2</td>
</tr>
<tr>
<td>Part-time</td>
<td>20,3</td>
</tr>
<tr>
<td>Correspondence and personal initiative</td>
<td>68,5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100,0%</strong></td>
</tr>
</tbody>
</table>
### ANALYSIS OF RESPONDENTS ACCORDING TO EARNINGS

If you are employed indicate your annual income range. If you are in practice indicate your total earnings, i.e., salary, share of profits, interest received on capital account and deduct interest at 12% p.a. on capital.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of Responses</th>
<th>Less than R10 001</th>
<th>R10 001 to R15 000</th>
<th>R15 001 to R20 000</th>
<th>R20 001 to R25 000</th>
<th>R25 001 to R30 000</th>
<th>R30 001 to R35 000</th>
<th>Above R35 000</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL RESPONSES</td>
<td>2280</td>
<td>10.0</td>
<td>32.9</td>
<td>23.9</td>
<td>13.7</td>
<td>8.0</td>
<td>4.6</td>
<td>6.9</td>
<td>100.0</td>
</tr>
<tr>
<td>OCCUPATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commerce and Industry</td>
<td>900</td>
<td>6.2</td>
<td>36.0</td>
<td>28.3</td>
<td>13.0</td>
<td>7.4</td>
<td>3.9</td>
<td>5.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Consultancy</td>
<td>23</td>
<td>0.0</td>
<td>34.8</td>
<td>4.3</td>
<td>8.7</td>
<td>8.7</td>
<td>8.7</td>
<td>8.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Education</td>
<td>60</td>
<td>13.3</td>
<td>65.0</td>
<td>18.3</td>
<td>0.0</td>
<td>1.7</td>
<td>1.7</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Finance</td>
<td>144</td>
<td>2.8</td>
<td>37.5</td>
<td>29.9</td>
<td>11.1</td>
<td>6.2</td>
<td>4.2</td>
<td>8.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Public Practice:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal - less than 5 years</td>
<td>279</td>
<td>7.9</td>
<td>41.2</td>
<td>31.9</td>
<td>11.8</td>
<td>3.9</td>
<td>2.2</td>
<td>1.1</td>
<td>100.0</td>
</tr>
<tr>
<td>- 5 - 10 years</td>
<td>200</td>
<td>2.5</td>
<td>18.5</td>
<td>24.0</td>
<td>22.5</td>
<td>18.5</td>
<td>7.0</td>
<td>7.0</td>
<td>100.0</td>
</tr>
<tr>
<td>- above 10 years</td>
<td>415</td>
<td>4.8</td>
<td>13.5</td>
<td>18.3</td>
<td>22.4</td>
<td>13.3</td>
<td>9.4</td>
<td>18.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Employee</td>
<td>205</td>
<td>46.3</td>
<td>50.3</td>
<td>3.4</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Retired</td>
<td>13</td>
<td>53.8</td>
<td>23.1</td>
<td>0.0</td>
<td>7.7</td>
<td>0.0</td>
<td>0.0</td>
<td>15.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Other</td>
<td>41</td>
<td>29.3</td>
<td>29.3</td>
<td>22.0</td>
<td>12.2</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
<td>100.0</td>
</tr>
<tr>
<td>AGE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 31 years</td>
<td>516</td>
<td>23.3</td>
<td>51.9</td>
<td>18.2</td>
<td>5.2</td>
<td>0.8</td>
<td>0.2</td>
<td>0.4</td>
<td>100.0</td>
</tr>
<tr>
<td>31 - 40 years</td>
<td>879</td>
<td>4.8</td>
<td>32.7</td>
<td>28.3</td>
<td>15.1</td>
<td>9.2</td>
<td>4.3</td>
<td>5.6</td>
<td>100.0</td>
</tr>
<tr>
<td>41 - 55 years</td>
<td>661</td>
<td>3.0</td>
<td>21.5</td>
<td>26.3</td>
<td>18.0</td>
<td>12.4</td>
<td>6.7</td>
<td>11.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Above 55 years</td>
<td>224</td>
<td>18.3</td>
<td>24.1</td>
<td>12.9</td>
<td>14.3</td>
<td>6.7</td>
<td>9.4</td>
<td>14.3</td>
<td>100.0</td>
</tr>
<tr>
<td>DEGREE OR NO DEGREE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree</td>
<td>685</td>
<td>12.8</td>
<td>37.4</td>
<td>19.4</td>
<td>11.2</td>
<td>7.6</td>
<td>4.4</td>
<td>7.2</td>
<td>100.0</td>
</tr>
<tr>
<td>No Degree</td>
<td>1595</td>
<td>8.8</td>
<td>31.0</td>
<td>25.9</td>
<td>14.7</td>
<td>8.2</td>
<td>4.6</td>
<td>6.8</td>
<td>100.0</td>
</tr>
</tbody>
</table>
## Annexure B.6

### Analysis of Main Activity of Chartered Accountants Not in Public Practice, with the Exception of University Teachers of Accounting and Retired Accountants

<table>
<thead>
<tr>
<th>Activity</th>
<th>Total Responses</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. General Management and Administration</td>
<td>655</td>
<td>58.2</td>
</tr>
<tr>
<td>2. Marketing</td>
<td>21</td>
<td>1.9</td>
</tr>
<tr>
<td>3. Personnel</td>
<td>5</td>
<td>0.4</td>
</tr>
<tr>
<td>4. Finance</td>
<td>228</td>
<td>20.2</td>
</tr>
<tr>
<td>5. Accounting</td>
<td>138</td>
<td>12.3</td>
</tr>
<tr>
<td>6. Data Processing</td>
<td>12</td>
<td>1.1</td>
</tr>
<tr>
<td>7. Secretarial</td>
<td>2</td>
<td>0.2</td>
</tr>
<tr>
<td>8. Other</td>
<td>35</td>
<td>3.1</td>
</tr>
<tr>
<td>9. Not indicated</td>
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### Analysis of Designation of Present Position

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The designation "other" includes:

- Administrative Manager,
- Assistant General Manager,
- Commercial Manager,
- Consultant,
- Divisional Manager,
- Financial Manager,
- Financial Services Manager,
- General Manager,
- Internal Auditor,
- Investigation Accountant,
- Investment Analyst,
- Investment Manager,
- Liquidator / Trustee,
- Management Accountant,
- Manager,
- Marketing Manager,
- Merchant Banker,
- Property Adviser,
- State Auditor,
- Treasurer.
PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 7

Indicate which of the statements made below is most acceptable to you:

a) All prospective Chartered Accountants must undergo some period of supervised practical experience (articles) in a practitioner's office prior to qualification.

b) Prospective Chartered Accountants wishing to enter public practice must undergo some period of supervised practical experience (articles) prior to qualification.

c) Practical experience is not required of the prospective Chartered Accountant.

d) Prospective Chartered Accountants, should, prior to qualification, either undergo a period of supervised practical experience in a practitioner's office or combine experience in a practitioner's office with a period in commerce and industry.

e) Other

<table>
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<tr>
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<th>(a)</th>
<th>(b)</th>
<th>(c)</th>
<th>(d)</th>
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<th>(c)</th>
<th>(d)</th>
<th>(e)</th>
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<th>(c)</th>
<th>(d)</th>
<th>(e)</th>
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<tr>
<td>41 - 55 years</td>
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<td>0.1</td>
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<tr>
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<th>(b)</th>
<th>(c)</th>
<th>(d)</th>
<th>(e)</th>
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PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 8

Assuming that a supervised practical experience period prior to qualification is required, should this be:

a) under the present system of articles

b) or a service contract with free transferability

c) or other?

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<th>(b)</th>
<th>(c)</th>
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## PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 9

Are you in favour of making a university degree a pre-requisite to the commencement of the supervised practical experience period?

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</table>

## PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 10

Indicate which of the statements made below is most acceptable to you:

a) Approved universities should have the power to examine prospective entrants to the profession without the Public Accountants' and Auditors' Board setting a subsequent final examination.

b) Approved universities should have the power to examine prospective entrants to the profession, but the Public Accountants' and Auditors' Board should set an examination for those desiring practising certificates.

c) The Public Accountants' and Auditors' Board should set an examination for all prospective Chartered Accountants.

d) Other.

<table>
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<th>(c)</th>
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</tr>
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</table>
ANNEXURE B.9

PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 11

In the event of universities agreeing to set a uniform final examination in lieu of the Certificate in the Theory of Accountancy, indicate which statement is most acceptable to you:

a) That no further examination whatsoever be set by the Public Accountants' and Auditors' Board and the designation C.A.(S.A.) may be used upon registration with one of the provincial societies.

b) That the Public Accountants' and Auditors' Board should set an examination for those desiring practising certificates, and this examination to be written during the last year of the practical experience period and the C.A.(S.A.) designation may be used upon registration with one of the provincial societies.

c) That the Public Accountants' and Auditors' Board should set an examination for all prospective Chartered Accountants.

d) Other.

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<th>(b)</th>
<th>(c)</th>
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<td>1,6</td>
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PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 12

Should the future accountant be exposed to a broader education allowing for additional optional subjects such as philosophy, psychology, sociology, etc.?

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<td>4,7</td>
<td>100,0</td>
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### Percental Analysis of Responses to Question 13(a)

Indicate whether the future accountant should have greater exposure to university education in: Financial Management.

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### Percental Analysis of Responses to Question 13(b)

Indicate whether the future accountant should have greater exposure to university education in: Management and Related Techniques

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**PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 13(c)**

Indicate whether the future accountant should have greater exposure to university education in quantitative techniques.

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**PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 13(d) (i)**

Indicate whether the future accountant should have greater exposure to university education in elementary programming.

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### PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 13(d)(ii)

Indicate whether the future accountant should have greater exposure to university education in detailed computer programming.

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### PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 13(d)(iii)

Indicate whether the future accountant should have greater exposure to university education in design of computer systems.

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### PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 13(d)(iv)

Indicate whether the future accountant should have greater exposure to university education in audit and control features of computers.

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<tr>
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### AGE

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<th>No Opinion</th>
<th>100%</th>
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### DEGREE OR NO DEGREE

<table>
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<th>No</th>
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### PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 14

Should the subjects prescribed for a student's academic education allow for certain options, depending on whether he intends entering into public practice or one of the other fields?

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<th>Occupation</th>
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<th>No Opinion</th>
<th>100%</th>
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<td>61,7</td>
<td>38,3</td>
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<td>100,0</td>
</tr>
<tr>
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<td>63,8</td>
<td>32,8</td>
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<td>100,0</td>
</tr>
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### AGE

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<th>No Opinion</th>
<th>100%</th>
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</thead>
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<tr>
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### DEGREE OR NO DEGREE

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<th>No</th>
<th>No Opinion</th>
<th>100%</th>
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</thead>
<tbody>
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<td>39,3</td>
<td>1,5</td>
<td>100,0</td>
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<td>40,7</td>
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## PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 15

Do you consider the present system of part-time attendance at university satisfactory?

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<th>No</th>
<th>Opinion</th>
<th>100%</th>
</tr>
</thead>
<tbody>
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<td>26.8</td>
<td>6.4</td>
<td>100.0</td>
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<td>Public Practice</td>
<td>1130</td>
<td>66.4</td>
<td>27.6</td>
<td>6.0</td>
<td>100.0</td>
</tr>
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<td>41.7</td>
<td>55.0</td>
<td>3.3</td>
<td>100.0</td>
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<tr>
<td>Retired</td>
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<td>65.5</td>
<td>22.4</td>
<td>12.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Commerce etc.</td>
<td>1125</td>
<td>68.7</td>
<td>24.7</td>
<td>6.6</td>
<td>100.0</td>
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<td><strong>Age</strong></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Below 31 years</td>
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<td>67.2</td>
<td>28.8</td>
<td>4.0</td>
<td>100.0</td>
</tr>
<tr>
<td>31 - 40 years</td>
<td>893</td>
<td>71.6</td>
<td>23.4</td>
<td>5.0</td>
<td>100.0</td>
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<td>41 - 55 years</td>
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<td>30.2</td>
<td>7.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Above 55 years</td>
<td>276</td>
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<td>25.7</td>
<td>12.0</td>
<td>100.0</td>
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<td><strong>Degree or No Degree</strong></td>
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<td>30.3</td>
<td>5.2</td>
<td>100.0</td>
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<td>25.3</td>
<td>6.9</td>
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## PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 16

Should some system of block release be introduced?

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<th>Number of Responses</th>
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<th>No</th>
<th>Opinion</th>
<th>100%</th>
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</thead>
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<td>31.7</td>
<td>7.8</td>
<td>100.0</td>
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<td>1130</td>
<td>52.9</td>
<td>40.4</td>
<td>6.7</td>
<td>100.0</td>
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<td>Education</td>
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<td>65.0</td>
<td>30.0</td>
<td>5.0</td>
<td>100.0</td>
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<tr>
<td>Commerce etc.</td>
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<td>23.9</td>
<td>8.4</td>
<td>100.0</td>
</tr>
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<td><strong>Age</strong></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Below 31 years</td>
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<td>61.3</td>
<td>33.5</td>
<td>5.2</td>
<td>100.0</td>
</tr>
<tr>
<td>31 - 40 years</td>
<td>893</td>
<td>60.3</td>
<td>34.4</td>
<td>5.3</td>
<td>100.0</td>
</tr>
<tr>
<td>41 - 55 years</td>
<td>679</td>
<td>61.0</td>
<td>28.0</td>
<td>11.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Above 55 years</td>
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<td>58.3</td>
<td>29.0</td>
<td>12.7</td>
<td>100.0</td>
</tr>
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<td></td>
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<tr>
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<td>32.6</td>
<td>7.5</td>
<td>100.0</td>
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<td>60.8</td>
<td>31.3</td>
<td>7.9</td>
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### PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 17

Should there be any requirements to acquire approved post-qualification experience with a practitioner before a member may be authorised to practice under his own name?

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<tr>
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<th>Yes</th>
<th>No</th>
<th>No Opinion</th>
<th>100%</th>
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<td>100,0</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>56,3</td>
<td>42,8</td>
<td>0,9</td>
<td>100,0</td>
</tr>
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<td>45,0</td>
<td>3,3</td>
<td>100,0</td>
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<td>Retired</td>
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<td>62,1</td>
<td>36,2</td>
<td>1,7</td>
<td>100,0</td>
</tr>
<tr>
<td>Commerce etc.</td>
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<td>43,6</td>
<td>1,6</td>
<td>100,0</td>
</tr>
<tr>
<td>AGE</td>
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<td></td>
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</tr>
<tr>
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<td>46,9</td>
<td>52,4</td>
<td>0,7</td>
<td>100,0</td>
</tr>
<tr>
<td>31 - 40 years</td>
<td>893</td>
<td>56,0</td>
<td>42,3</td>
<td>1,7</td>
<td>100,0</td>
</tr>
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<td>41 - 55 years</td>
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<td>38,7</td>
<td>1,5</td>
<td>100,0</td>
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<td>38,4</td>
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<td>100,0</td>
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<td>44,2</td>
<td>1,9</td>
<td>100,0</td>
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<td>56,4</td>
<td>42,6</td>
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### PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 18

If your answer to question 17 is yes, what should the period of post qualification practical experience be?

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<th>Number of Responses</th>
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<th>18 Months</th>
<th>24 Months</th>
<th>36 Months</th>
<th>Other</th>
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<td></td>
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<td>1,1</td>
<td>100,0</td>
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<tr>
<td>Education</td>
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<td>38,7</td>
<td>12,9</td>
<td>42,0</td>
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<td>3,2</td>
<td>100,0</td>
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<td>0,0</td>
<td>0,0</td>
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<td>3,0</td>
<td>2,4</td>
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<td>12,3</td>
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<td>Above 55 years</td>
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<td>3,6</td>
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### PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 19

In the event of post-qualification practical experience becoming mandatory before a person may be registered as a practicing accountant, should the requirement be waived in the event of a C.A. being admitted into partnership by another practitioner?

<table>
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<tr>
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<th>Yes</th>
<th>No</th>
<th>No Opinion</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Responses</td>
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<td>448</td>
<td>471</td>
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#### OCCUPATION

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<th>Education</th>
<th>Retired</th>
<th>Commerce etc.</th>
</tr>
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<tr>
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<td>58</td>
<td>1125</td>
</tr>
<tr>
<td>Yes</td>
<td>44.8</td>
<td>41.7</td>
<td>46.6</td>
</tr>
<tr>
<td>No</td>
<td>48.5</td>
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<td>48.2</td>
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<td>8.3</td>
<td>5.2</td>
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#### AGE

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<th>31 - 40 years</th>
<th>41 - 55 years</th>
<th>Above 55 years</th>
</tr>
</thead>
<tbody>
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<td>525</td>
<td>893</td>
<td>679</td>
<td>276</td>
</tr>
<tr>
<td>Yes</td>
<td>48.4</td>
<td>43.2</td>
<td>42.7</td>
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<tr>
<td>No</td>
<td>42.7</td>
<td>50.1</td>
<td>47.6</td>
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<tr>
<td>No Opinion</td>
<td>8.9</td>
<td>6.7</td>
<td>9.7</td>
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#### DEGREE OR NO DEGREE

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<th>No Degree</th>
</tr>
</thead>
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</tr>
<tr>
<td>No</td>
<td>46.2</td>
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<tr>
<td>No Opinion</td>
<td>9.6</td>
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<tr>
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</table>

### PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 20

**How do you envisage the structure of the profession 10 years hence?**

a) As presently structured, consisting of C.A.s, either practising or non-practising.
b) Or the present C.A. together with a lower tier, possibly a "technician" grade.
c) Or a two tier structure, the present C.A. together with a higher "specialist" tier.
d) Or a multi-tier structure, the present C.A. together with a "specialist" tier as well as a "technician" grade.
e) Or other.

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<th>(c)</th>
<th>(d)</th>
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#### AGE

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# ANNEXURE B.17

## PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 21

How do you envisage the structure of the controlling bodies (or organisations) of the profession 10 years hence?

- **a)** As presently structured, consisting of the Public Accountants' and Auditors' Board, The National Council of Chartered Accountants (S.A.), provincial societies and regional associations.
- **b)** The Public Accountants' and Auditors' Board, a national society of Chartered Accountants (S.A.) and regional associations.
- **c)** One national statutory controlling body together with regional associations.
- **d)** Other

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## PERCENTAL ANALYSIS OR RESPONSES TO QUESTION 22

Should professionally qualified persons (note: not only accountants) periodically give proof of competence?

- **a)** by successfully writing examinations every 5 years?
- **b)** by attending a prescribed number of approved courses every 2 or 3 years?
- **c)** not at all?

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<td>100,0</td>
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### PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 23

If continuing education were to become mandatory for Chartered Accountants should C.A.'s not in public practice be exempt from this requirement?

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<td>100.0</td>
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### PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 25(a)

Should the auditor accept greater responsibility by the attest function being extended to include an opinion on half-yearly financial statements?

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### PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 25(b)

Should the auditor accept greater responsibility by the attest function being extended to include an opinion on annual and other profit forecasts including underlying assumptions?

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### PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 25(c)

Should the auditor accept greater responsibility by the attest function being extended to include an opinion on management effectiveness?

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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Practice</td>
<td>1 130</td>
<td>28,8</td>
<td>66,1</td>
<td>5,1</td>
<td>100,0</td>
</tr>
<tr>
<td>Education</td>
<td>60</td>
<td>48,3</td>
<td>46,7</td>
<td>5,0</td>
<td>100,0</td>
</tr>
<tr>
<td>Retired</td>
<td>58</td>
<td>17,2</td>
<td>69,0</td>
<td>13,8</td>
<td>100,0</td>
</tr>
<tr>
<td>Commerce etc.</td>
<td>1 125</td>
<td>34,9</td>
<td>59,0</td>
<td>6,1</td>
<td>100,0</td>
</tr>
<tr>
<td>AGE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 31 years</td>
<td>525</td>
<td>40,8</td>
<td>54,7</td>
<td>4,5</td>
<td>100,0</td>
</tr>
<tr>
<td>31 - 40 years</td>
<td>893</td>
<td>32,3</td>
<td>63,0</td>
<td>4,7</td>
<td>100,0</td>
</tr>
<tr>
<td>41 - 55 years</td>
<td>679</td>
<td>27,8</td>
<td>65,7</td>
<td>6,5</td>
<td>100,0</td>
</tr>
<tr>
<td>Above 55 years</td>
<td>276</td>
<td>23,9</td>
<td>66,3</td>
<td>9,8</td>
<td>100,0</td>
</tr>
<tr>
<td>DEGREE OR NO DEGREE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree</td>
<td>718</td>
<td>33,3</td>
<td>59,3</td>
<td>7,4</td>
<td>100,0</td>
</tr>
<tr>
<td>No Degree</td>
<td>1 655</td>
<td>31,3</td>
<td>63,6</td>
<td>5,1</td>
<td>100,0</td>
</tr>
</tbody>
</table>
PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 26

Should the financial statements of small private (but not subsidiary) companies, whose assets do not exceed a certain amount e.g. R60 000 or R100 000 and if all the shareholders agree therefore, still be audited?

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of Responses</th>
<th>Yes</th>
<th>No</th>
<th>No Opinion</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Practice</td>
<td>1 130</td>
<td>54.1</td>
<td>43.5</td>
<td>2.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Education</td>
<td>60</td>
<td>46.6</td>
<td>51.7</td>
<td>1.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Retired</td>
<td>58</td>
<td>65.5</td>
<td>27.6</td>
<td>6.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Commerce etc.</td>
<td>1 125</td>
<td>53.2</td>
<td>45.2</td>
<td>1.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Number of Responses</th>
<th>Yes</th>
<th>No</th>
<th>No Opinion</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 31 years</td>
<td>625</td>
<td>52.6</td>
<td>45.7</td>
<td>1.7</td>
<td>100.0</td>
</tr>
<tr>
<td>31 - 40 years</td>
<td>893</td>
<td>53.3</td>
<td>44.7</td>
<td>2.0</td>
<td>100.0</td>
</tr>
<tr>
<td>41 - 55 years</td>
<td>679</td>
<td>52.0</td>
<td>45.7</td>
<td>2.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Above 55 years</td>
<td>276</td>
<td>62.0</td>
<td>32.5</td>
<td>5.5</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Degree or No Degree</th>
<th>Number of Responses</th>
<th>Yes</th>
<th>No</th>
<th>No Opinion</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
<td>718</td>
<td>52.5</td>
<td>44.3</td>
<td>3.2</td>
<td>100.0</td>
</tr>
<tr>
<td>No Degree</td>
<td>1 655</td>
<td>54.3</td>
<td>44.1</td>
<td>1.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

# With the translation of question 26 into Afrikaans, the interpretation was altered resulting in the positive Afrikaans responses being the equivalent of the English negative responses and vice versa. Cognisance of this was taken in the processing of the questionnaires.

ANALYSIS OF RESPONSES TO QUESTION 34

How many years did you spend in a practitioners office after qualifying as a C.A., before going into commerce and industry?

<table>
<thead>
<tr>
<th>Number of Years</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>More than 4 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commerce and Industry</td>
<td>303</td>
<td>215</td>
<td>286</td>
<td>59</td>
<td>26</td>
<td>20</td>
<td>909</td>
</tr>
<tr>
<td>Consultancy</td>
<td>8</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td>Finance</td>
<td>51</td>
<td>20</td>
<td>55</td>
<td>6</td>
<td>7</td>
<td>5</td>
<td>144</td>
</tr>
<tr>
<td>Other</td>
<td>25</td>
<td>8</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>48</td>
</tr>
<tr>
<td>Total</td>
<td>387</td>
<td>244</td>
<td>354</td>
<td>70</td>
<td>37</td>
<td>33</td>
<td>1 125</td>
</tr>
</tbody>
</table>

Percentage

| 34.4 | 21.7 | 31.5 | 6.2  | 3.3  | 2.9  | 100% |


**ANALYSIS OF RESPONSES TO QUESTION 36**

Indicate whether the use of modern mathematical techniques in your firm has increased, remained constant or decreased compared to three years ago.

<table>
<thead>
<tr>
<th>TOTAL RESPONSES</th>
<th>Number of Responses</th>
<th>Increased</th>
<th>Same</th>
<th>Decreased</th>
<th>No Opinion</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 125</td>
<td>49,0</td>
<td>42,9</td>
<td>0,6</td>
<td>7,5</td>
<td>100,0</td>
</tr>
<tr>
<td>Commerce and Industry</td>
<td>909</td>
<td>50,0</td>
<td>43,9</td>
<td>0,8</td>
<td>5,3</td>
<td>100,0</td>
</tr>
<tr>
<td>Consultancy</td>
<td>24</td>
<td>37,5</td>
<td>45,8</td>
<td>0,0</td>
<td>16,7</td>
<td>100,0</td>
</tr>
<tr>
<td>Finance</td>
<td>144</td>
<td>54,2</td>
<td>36,8</td>
<td>0,0</td>
<td>9,0</td>
<td>100,0</td>
</tr>
<tr>
<td>Other</td>
<td>48</td>
<td>18,7</td>
<td>39,6</td>
<td>0,0</td>
<td>41,7</td>
<td>100,0</td>
</tr>
</tbody>
</table>

**PERCENTAL ANALYSIS OF RESPONSES TO QUESTION 37**

Do you consider that the experience gained during your practical experience period (articles) has been of assistance to you in your present career?

<table>
<thead>
<tr>
<th>TOTAL RESPONSES</th>
<th>Number of Responses</th>
<th>Yes</th>
<th>No</th>
<th>No Opinion</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 125</td>
<td>92,6</td>
<td>4,5</td>
<td>2,9</td>
<td>100,0</td>
</tr>
<tr>
<td>OCCUPATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commerce and Industry</td>
<td>909</td>
<td>93,4</td>
<td>4,6</td>
<td>2,0</td>
<td>100,0</td>
</tr>
<tr>
<td>Consultancy</td>
<td>24</td>
<td>83,3</td>
<td>4,2</td>
<td>12,5</td>
<td>100,0</td>
</tr>
<tr>
<td>Finance</td>
<td>144</td>
<td>96,5</td>
<td>2,1</td>
<td>1,4</td>
<td>100,0</td>
</tr>
<tr>
<td>Other</td>
<td>48</td>
<td>70,8</td>
<td>8,4</td>
<td>20,8</td>
<td>100,0</td>
</tr>
<tr>
<td>Number</td>
<td>Question</td>
<td>Occupation</td>
<td>Age</td>
<td>Degree/No Degree</td>
<td>Analysis - &quot;No Opinions&quot; (%)</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------------------</td>
<td>------------</td>
<td>--------------</td>
<td>------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>7</td>
<td>Practical Experience</td>
<td>16 26.30  186.5 S</td>
<td>16 26.30  47.9 S</td>
<td>8 15.51  5.9 S</td>
<td>Total 0.7  Csp 0.6  Nta 0.5  Other 0.0</td>
</tr>
<tr>
<td>8</td>
<td>Service Contract</td>
<td>8 15.51  136.1 S</td>
<td>8 15.51  67.7 S</td>
<td>4 9.49  10.8 N.S.</td>
<td>1.4 1.4 2.1 0.0 1.4 0.0</td>
</tr>
<tr>
<td>9</td>
<td>Graduate Entry</td>
<td>4 9.49  20.6 S</td>
<td>4 9.49  10.0 S</td>
<td>2 5.99  91.2 S</td>
<td>1.8 1.4 3.3 1.7 1.7 0.0</td>
</tr>
<tr>
<td>10</td>
<td>Universities and Final Qualifying Examination</td>
<td>12 21.03  49.8 S</td>
<td>12 21.03  39.9 S</td>
<td>6 12.59  4.3 S</td>
<td>0.9 1.4 1.5 1.7 0.4 4.5</td>
</tr>
<tr>
<td>11</td>
<td>Uniform C.T.A. and Final Qualifying Examination</td>
<td>12 21.03  68.0 S</td>
<td>12 21.03  16.4 N.S.</td>
<td>6 12.59  1.1 S</td>
<td>1.6 1.6 3.3 5.2 0.9 4.5</td>
</tr>
<tr>
<td>12</td>
<td>Broader Education</td>
<td>4 9.49  47.1 S</td>
<td>4 9.49  19.6 S</td>
<td>2 5.99  4.2 S</td>
<td>4.0 3.2 4.9 8.6 3.9 4.5</td>
</tr>
<tr>
<td>13</td>
<td>Greater Exposure to University Education in:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13(a)</td>
<td>Financial Management</td>
<td>4 9.49  21.2 S</td>
<td>4 9.49  25.8 S</td>
<td>2 5.99  4.6 S</td>
<td>5.7 8.7 9.2 8.6 3.6 4.5</td>
</tr>
<tr>
<td>13(b)</td>
<td>Management</td>
<td>4 9.49  57.2 S</td>
<td>4 9.49  33.5 S</td>
<td>2 5.99  5.9 S</td>
<td>8.4 13.1 11.8 17.2 5.4 4.5</td>
</tr>
<tr>
<td>13(c)</td>
<td>Quantitative Techniques</td>
<td>4 9.49  0.3 N.S.</td>
<td>4 9.49  1.4 N.S.</td>
<td>2 5.99  1.1 S</td>
<td>22.1 28.7 26.4 29.3 18.4 13.6</td>
</tr>
<tr>
<td>13(d)</td>
<td>Computers:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13(d)(i)</td>
<td>Elementary Programming</td>
<td>4 9.49  5.5 N.S.</td>
<td>4 9.49  4.0 N.S.</td>
<td>2 5.99  0.3 S</td>
<td>13.7 17.4 15.4 19.0 11.7 13.6</td>
</tr>
<tr>
<td>13(d)(ii)</td>
<td>Detailed Programming</td>
<td>4 9.49  29.7 S</td>
<td>4 9.49  25.6 S</td>
<td>2 5.99  0.0 S</td>
<td>25.8 28.9 27.2 29.3 24.2 31.8</td>
</tr>
<tr>
<td>13(d)(iii)</td>
<td>Systems Design</td>
<td>4 9.49  32.3 S</td>
<td>4 9.49  4.5 N.S.</td>
<td>2 5.99  1.5 S</td>
<td>17.4 21.8 17.9 29.3 15.2 13.6</td>
</tr>
<tr>
<td>13(d)(iv)</td>
<td>Audit and Control Features</td>
<td>4 9.49  18.2 S</td>
<td>4 9.49  0.6 N.S.</td>
<td>2 5.99  1.6 S</td>
<td>8.0 10.5 11.3 12.1 5.9 9.1</td>
</tr>
<tr>
<td>14</td>
<td>Optional Subjects</td>
<td>4 9.49  27.5 S</td>
<td>4 9.49  8.4 N.S.</td>
<td>2 5.99  0.6 S</td>
<td>1.8 2.8 3.6 0.0 1.1 4.5</td>
</tr>
<tr>
<td>15</td>
<td>Part-Time Attendance</td>
<td>4 9.49  25.7 S</td>
<td>4 9.49  12.1 S</td>
<td>2 5.99  5.5 S</td>
<td>6.4 9.1 7.9 10.3 4.7 9.1</td>
</tr>
<tr>
<td>16</td>
<td>Block Release</td>
<td>4 9.49  72.0 S</td>
<td>4 9.49  4.0 N.S.</td>
<td>2 5.99  0.3 S</td>
<td>7.8 11.7 10.8 9.6 5.4 9.1</td>
</tr>
<tr>
<td>17</td>
<td>Post-Qualification Experience</td>
<td>4 9.49  1.5 N.S.</td>
<td>4 9.49  25.7 S</td>
<td>2 5.99  0.8 S</td>
<td>1.2 2.4 2.6 1.7 0.6 0.0</td>
</tr>
<tr>
<td>18</td>
<td>Period of Post-Qualification Experience</td>
<td>16 26.30  21.7 N.S.</td>
<td>16 26.30  23.8 S</td>
<td>8 15.51  6.6 S</td>
<td>Not applicable</td>
</tr>
<tr>
<td>19</td>
<td>Post-Qualification Experience and Partner</td>
<td>4 9.49  0.8 N.S.</td>
<td>4 9.49  7.2 S</td>
<td>2 5.99  0.0 S</td>
<td>8.1 9.5 10.3 6.9 7.1 9.1</td>
</tr>
<tr>
<td>20</td>
<td>Structure - Tiers</td>
<td>16 26.30  15.4 N.S.</td>
<td>16 26.30  7.0 N.S.</td>
<td>8 15.51  6.7 S</td>
<td>1.9 3.8 3.3 0.0 0.9 4.5</td>
</tr>
<tr>
<td>21</td>
<td>Structure - Controlling Bodies</td>
<td>12 21.03  10.3 N.S.</td>
<td>12 21.03  34.5 S</td>
<td>6 12.59  2.0 S</td>
<td>3.3 5.9 6.7 5.2 1.4 0.0</td>
</tr>
<tr>
<td>22</td>
<td>Required Continuing Education</td>
<td>8 15.51  19.3 S</td>
<td>8 15.51  72.9 S</td>
<td>4 9.49  5.2 S</td>
<td>1.9 3.6 2.0 3.4 1.0 0.0</td>
</tr>
<tr>
<td>23</td>
<td>Required Continuing Education - C.A. not in Public Practice</td>
<td>4 9.49  53.3 S</td>
<td>4 9.49  44.0 S</td>
<td>2 5.99  0.1 S</td>
<td>8.3 9.1 9.7 6.9 7.7 9.1</td>
</tr>
<tr>
<td>25</td>
<td>Extension of the Attest Function:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25(a)</td>
<td>Half-Yearly Financial Statements</td>
<td>4 9.49  40.6 S</td>
<td>4 9.49  6.5 N.S.</td>
<td>2 5.99  1.3 S</td>
<td>6.9 9.5 10.8 6.9 4.8 9.1</td>
</tr>
<tr>
<td>25(b)</td>
<td>Annual and Other Profit Forecasts</td>
<td>4 9.49  48.3 S</td>
<td>4 9.49  6.6 N.S.</td>
<td>2 5.99  4.7 S</td>
<td>6.7 8.3 9.7 8.6 5.0 4.5</td>
</tr>
<tr>
<td>25(c)</td>
<td>Management Effectiveness</td>
<td>4 9.49  22.0 S</td>
<td>4 9.49  28.3 S</td>
<td>2 5.99  1.8 S</td>
<td>5.8 8.1 10.0 10.3 3.5 0.0</td>
</tr>
<tr>
<td>26</td>
<td>Private Company Audits</td>
<td>4 9.49  6.9 N.S.</td>
<td>4 9.49  9.4 N.S.</td>
<td>2 5.99  0.2 S</td>
<td>2.1 4.0 2.3 3.4 1.4 0.0</td>
</tr>
</tbody>
</table>

1 - Critical Value at probability level 0.5
2 - S = Significant, N.S. = Not significant
3 - The reason for this analysis is that different covering letters were sent with questionnaires in the various provinces.
For further particulars see pages 5/6 of main text and annexures A.6 and A.7 for covering letters.
4 - Not significant at probability level 0.1.
### Analysis of Responses to Section E of the Questionnaire

Respondents were requested to indicate the relative importance of various topics in their present work and the anticipated importance 10 years hence. The responses to the importance of the topics in the present work was weighted as follows: 1 = not used; 2 = below average; 3 = average; 4 = above average.

#### Mean and Ranking of Topics According to Present Importance and Anticipated Importance 10 Years Hence

<table>
<thead>
<tr>
<th>Topic</th>
<th>Present Respondents</th>
<th>C.A.'s Not in Practice</th>
<th>C.A.'s in Public Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting in relation to changes in purchasing power</td>
<td>1.99</td>
<td>45</td>
<td>7.6</td>
</tr>
<tr>
<td>Accounting for trusts or estates</td>
<td>1.64</td>
<td>50</td>
<td>5.9</td>
</tr>
<tr>
<td>Accounting for specialised undertakings e.g. banks, co-ops, mines etc.</td>
<td>1.78</td>
<td>45</td>
<td>5.0</td>
</tr>
<tr>
<td>Audit of E.D.P. systems</td>
<td>1.90</td>
<td>39</td>
<td>5.2</td>
</tr>
<tr>
<td>Behavioral sciences</td>
<td>1.78</td>
<td>45</td>
<td>4.9</td>
</tr>
<tr>
<td>Budgetary Control</td>
<td>2.90</td>
<td>45</td>
<td>3.6</td>
</tr>
<tr>
<td>Communication (written and spoken)</td>
<td>3.21</td>
<td>25</td>
<td>3.2</td>
</tr>
<tr>
<td>Computer Programming</td>
<td>1.65</td>
<td>45</td>
<td>4.9</td>
</tr>
<tr>
<td>Corporations</td>
<td>2.62</td>
<td>45</td>
<td>4.9</td>
</tr>
<tr>
<td>Corporate Finance</td>
<td>2.60</td>
<td>45</td>
<td>4.9</td>
</tr>
<tr>
<td>Cost-benefit Analysis</td>
<td>2.25</td>
<td>25</td>
<td>4.2</td>
</tr>
<tr>
<td>Economics</td>
<td>2.10</td>
<td>28</td>
<td>4.0</td>
</tr>
<tr>
<td>Electronic Data Processing</td>
<td>2.31</td>
<td>21</td>
<td>4.3</td>
</tr>
<tr>
<td>Farming Accounts</td>
<td>1.78</td>
<td>45</td>
<td>4.3</td>
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**TOP FIFTEEN TOPICS ACCORDING TO OCCUPATION CLASSIFICATION**

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**COMMENTS ON RESPONSES TO SECTION E**

As was pointed out in the introduction, reservations were expressed about Section E. The reservations were that Section E was too long and had too many topics and this has been proved. Approximately one-third of the questionnaires in Section E were rejected. In some cases large portions of Section E were not complete. Other respondents, who should have known obvious topics, indicated "topic unknown", suggesting that they did not take this section seriously.

It has often been suggested that prior to qualification as a chartered accountant, the trainee accountant, should be able to choose courses dependent upon whether he wishes to remain in public practice or to go into commerce and industry. This is possibly highlighted by the importance that chartered accountants in public practice attach to various topics. If the top fifteen topics of chartered accountants in public practice are compared with those of their colleagues in public practice, it is seen that the requirements are quite different. (See Annexure D1 and D2 for details). Small business accounts and audit is ranked one by small firms (consisting of one to five chartered accountants), four by medium-sized firms (consisting of six to fifteen chartered accountants), and eight by large firms (consisting of more than fifteen chartered accountants). Internal control is respectively ranked eight, six and three by small, medium and large-sized firms. Sampling techniques and the audit of electronic data processing are ranked in the top fifteen only by the respondents employed in large firms.

The respondents employed by the small firms did not attach much importance to audit of electronic data processing, consolidations, financial ratio analysis and sampling techniques, but they consider farming accounts to be relevant to their practice. (For ranking see above).

Although firms place different emphasis on various topics depending on the size of the firm, most of the top fifteen topics are common to all the firms. A perusal reveals that the following eleven topics are common to all three groups of chartered accountants in public practice: small business accounts and audit, income tax - individuals, income tax - companies, verification of assets and liabilities, company law, tax and estate planning, communication, internal control, valuation of shares and businesses, inventory control, and staff training.

The topics detailed below should be of greater importance in the future. (More than 50% of responses indicated that the topics would be more important in future).

**Chartered Accountants not in Public Practice**
- Accounting in relation to changes in purchasing power
- Budgetary Control
- Communication - written and spoken
- Corporate Policy
- Corporate Finance
- Electronic Data Processing
- Forecasting
- Management Information Systems
- Profit Planning
- Staff Training and Development

**Chartered Accountants in Public Practice**
- Accounting in relation to changes in purchasing power
- Auditing of EDI Systems
- Budgetary Control
- Computer Programming
- Electronic Data Processing
- Management Information Systems
- Sampling Techniques
- Staff Training and Development
- Tax and Estate Planning
LIST OF PARTICIPATING UNIVERSITIES THAT HAVE CONTRACTED
WITH THE PUBLIC ACCOUNTANTS' AND AUDITORS' BOARD IN TERMS
OF THE ACCOUNTANTS' CLERKS' UNIVERSITY EDUCATION SCHEME

Potchefstroom University for Christian Higher Education
Rhodes University
University of Cape Town
University of Natal
University of the Orange Free State
University of Port Elizabeth
University of Pretoria
University of South Africa
University of Stellenbosch
University of the Witwatersrand
Rand Afrikaans University
University of Durban-Westville
University of the Western Cape

(a) Ranking According to Average for Each Paper

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(b) Ranking of First-Timer Candidates of Universities on the following bases:

- % Successful first-timers (FIRST-TIMERS)
- Aggregate Attained for all first-timers (AGGREGATE)

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**NOTE:** The above information has been extracted from the 1976 prospectuses of the various universities.
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**NOTE:** The above information has been extracted from the 1976 prospectuses of the various universities.
SELECTED EXTRACTS FROM SYLLABI OF ACCOUNTING INSTITUTES AROUND THE WORLD

Objective: To illustrate the diversity of approaches to defining the common body of knowledge by the various accounting bodies around the world and to illustrate the point that broad outlines for the common body of knowledge can be defined leaving the details to the universities.

The subjects outlined are:
1. Accounting
2. Auditing
3. Computers and Data Processing including the audit thereof
4. Management Controls
5. Quantitative Techniques
6. Operational Auditing

The Levels of knowledge referred to in this Annexure are defined by the respective institutes as follows:

THE CANADIAN INSTITUTE OF CHARTERED ACCOUNTANTS

(i) Level One
(a) appreciation of the nature and fundamentals involved;
(b) ability to recognize the existence or likelihood of existence of specific features and problems in various business transactions and to determine what further study or research must be undertaken under various conditions.

(ii) Level Two
(a) understanding of the broad aspects of practices and procedures and awareness of the problems relating to more detailed aspects thereof;
(b) the ability to apply broad knowledge to situations likely to be encountered, to recognize the more detailed aspects which must be considered and to carry out research and studies necessary to come to a reasonable solution.

(iii) (a) in-depth understanding of principles practices and procedures;
(b) the ability to apply in-depth knowledge to situations likely to be encountered and to deal with all aspects thereof without extensive recourse to technical research and assistance.

THE INSTITUTE OF CHARTERED ACCOUNTANTS IN AUSTRALIA

SUBJECT "WEIGHTINGS" are set out

To assist students in the study of the subjects of the alternative course, tentative "weightings" are set out below.

The "weightings" are subjective and to some extent arbitrary. Their purpose is to reflect the scope of and degree of detail in each subject, the level of difficulty and depth the need to acquire manipulative skills in some subjects and the likely degree of prior knowledge by candidates of the subject area.

THE PUBLIC ACCOUNTANTS' AND AUDITORS' BOARD
(Effective from 1 January 1980)

Definition of knowledge required.

(a) Thorough Knowledge
(i) Sound understanding of principles, practices and procedures.
(ii) The ability to apply such knowledge to situations likely to be encountered without recourse to extensive further technical study, investigation and assistance.

(b) Good working knowledge
(i) An understanding of the broad aspects of principles, practices and procedures.
(ii) The ability to apply such knowledge to situations likely to be encountered to recognize the more detailed aspects which must be considered and to carry out such further studies and investigations as are necessary to come to a reasonable solution.

(c) General knowledge
An understanding sufficient to recognize the existence or likelihood of existence of specific features and problems and to determine what further study or investigation must be undertaken.

This implies a level of knowledge higher than what can normally be achieved by skimming through literature.

The information in this annexure has been compiled from the sources detailed below:

AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS

1. "Information for CPA Candidates"

2. Roy Robert H. and MacNeil, James H., "The Horizons for a profession"

NEW ZEALAND SOCIETY OF ACCOUNTANTS


THE CANADIAN INSTITUTE OF CHARTERED ACCOUNTANTS


SPECIALIZED ACCOUNTING

Theory and Practical Application, Level Two

(a) Fund accounting
(b) Estate and trust accounting
(c) Bankruptcy, liquidation receivership, creditors' arrangements, including pertinent legal requirements.
(d) Agency and branch operations, departmental operations, conventions and installment sales.

PUBLIC ACCOUNTANTS' AND AUDITORS' BOARD

ACCOUNTING:

Note - The importance from the point of view of management of the interpretation of accounting records and the use of information for policy decisions and control purposes is stressed.

(a) Thorough knowledge.

(i) Theory of double entry bookkeeping;
Sources of information and nature of documents from which books of account are compiled.
(ii) Books of prime entry, including columnar records;
(iii) Recording of transactions and posting to the ledger.
(iv) Use of journal.
Nominal and subsidiary ledgers and control accounts.
Balancing the ledgers: Preparation, uses and limitations of the trial balance.
(v) Reconciliation statements.
Incomplete records.
(vi) Preparation of basic types of financial statements.
Classification of accounts.
Accounting terminology.

(ii) Underlying concepts and generally accepted principles of accounting:

(a) Basic concepts:
Distinction between assets of business and those of proprietors.
Consistency with previous accounting period.
Distinction between capital and recurring revenue.
Materiality.

(b) Asset valuation:
Cost and departure from cost; in special circumstances.
Diminution in asset values, e.g. allowance for bad debts, accumulated amortization and depreciation provisions.
Specific aspects.
Intangibles.
Fixed assets.
Investments.
Stock and work in progress.
Debtors.
Other current assets.

(c) Measurement of profit and loss:
Recognition of when income is earned.
Matching of costs and revenue.
Treatment of non-recurring or exceptional items.
Deferred income and deferred expenditure.
Taxation, including deferred taxation.
Accounting cycle - the natural business year.
(iii) Preparation and presentation of financial statements:

Balance sheet.
Profit and loss account.
Receipts and payments account.
Income and expenditure account.
Limitations in use of financial statements.
Ratio analysis.
Source and application of funds.
Standards of disclosure, i.e. accounting principles and legal requirements, such as the provisions of the Companies Act.

Notes to financial statements.
Reports to shareholders, interim and annual.
Events subsequent to accounting date.
Group financial statements.
Consolidated accounts.
Other forms of groups accounts.

(iv) General:

Partnership accounts (including treatment of goodwill).
Branch accounts.
Specialised transactions, including hire-purchase, instalment, sales, township development, consignment, agency and foreign exchange.

Reporting in relation to changes in purchasing power of money.
Accounts of trustees, liquidators and executors.

Developments and changes in generally accepted accounting principles and practices as published in statements issued from time to time by the Public Accountants' and Auditors' Board, the National Council of Chartered Accountants (S.A.) and other organised professional accounting bodies.

(b) General knowledge.

(i) The accounts of specialised undertakings including those of:
- Banks.
- Building societies.
- Co-operatives.
- Friendly societies.
- Mines.
- Insurance companies.
- Pension and provident funds.

(ii) Current developments of and changes in accounting practices which are gaining popularity but which cannot be said to be generally accepted.
COMPARISON OF SYLLABI OF VARIOUS ACCOUNTING INSTITUTES - AUDITING:

AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS

For details see Chapter 4.10

THE CANADIAN INSTITUTE OF CHARTERED ACCOUNTANTS

AUDITING:

(a) Audit objectives
(b) Audit planning, including determination of the scope of the audit
(c) Techniques and procedures:
   (i) General;
   (ii) Evaluation of internal control;
   (iii) Flow charting;
   (iv) Statistical sampling.
(d) Generally accepted auditing standards.
(e) Problems relating to:
   (i) Unincorporated businesses;
   (ii) Consolidated statements;
   (iii) Prospectuses.
(f) Events subsequent to balance sheet date.
(g) Operational and management auditing.
(h) Auditing standards as set out in the recommendations of the Auditing Standards Committee of the CICA.
(i) Guidelines issued by the Auditing Standards Steering Committee of the CICA.
(j) Current auditing literature from the following sources published within two years prior to the date of writing the Uniform Final Examination:
   (i) CA magazine;
   (ii) CICA Audit Techniques Studies;
   (iii) CICA Auditing Standards Committee Exposure Drafts;
   (iv) The Journal of Accountancy;
   (v) Statements of Auditing Standards issued by the American Institute of Certified Public Accountants.

PROFESSIONAL PRACTICE:

(a) Auditor's appointment
(b) Auditor's legal rights, responsibilities and liabilities.
(c) Professional ethics
(d) Organization of the accounting profession

INVESTIGATIONS:

(a) Planning the scope of the investigation, techniques and procedures to be used, and matters to which the final report should be directed.
(b) Fraud.

THE INSTITUTE OF CHARTERED ACCOUNTANTS IN AUSTRALIA

AUDITING AND INVESTIGATIONS:

General Prescription:
Responsibility of the auditor and auditing standards; use of statistical techniques; problems of valuation and verification; application to various forms of accounting systems, including computer systems. Preparation for and implementation of investigations.

Detailed Prescription:

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<th>Level</th>
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<td>Special features of company audits</td>
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<td>Professional ethics</td>
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<td>Audit of consolidated statements</td>
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<td>Qualification of reports</td>
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<td>Statistical sampling applied to auditing</td>
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<td>Auditor's role in systems design</td>
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<td>Investigations and special reports</td>
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<td>Events subsequent to balance sheet date</td>
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<tr>
<td>Auditor's report - formation of opinion and presentation</td>
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<td>Unincorporated businesses;</td>
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<td>Prospectuses.</td>
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<tr>
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<tr>
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<td>Reliance on other auditors</td>
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<td>Reporting on statements without audit</td>
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<td>Audit techniques for computer systems including impact of computer processing on audit techniques; hardware controls, program controls and external controls over data processing activity; audit of work processed at a data centre; use of computer as an audit tool.</td>
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<tr>
<td>Planning the scope of the investigation, techniques and procedures to be used, and matters to which the final report should be directed.</td>
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<tr>
<td>Problem analysis appropriate to:</td>
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THE INSTITUTE OF CHARTERED ACCOUNTANTS IN ENGLAND AND WALES

AUDITING (Professional Examination I):

1. Auditing
   (a) The objects of an audit; various types of audit; appointment of auditors; object and form of audit reports; in particular, the

.../nature
nature and purpose of the audit of the limited company; the place of the auditor in the economic framework of the business community; the importance of the independence of the auditor as a verifier of financial information and the nature of his responsibility for his opinions.

(b) The audit report under Section 14 of the Companies Act 1967; the meaning of the audit report and the recognised types of qualified opinions; the concept of truth and fairness.

(c) The responsibility of directors for presenting accounts showing a true and fair view, operating an appropriate system of internal control, and safeguarding the assets of the company; the auditor's relationship with the directors and management including letters of engagement and letters of weaknesses; co-ordination of internal and external audits.

(d) The form of the audit and the nature of audit evidence; the appraisal and evaluation of the systems of internal control over transactions, assets and liabilities; the design of detailed audit procedures; the drawing of conclusions therefrom; verification of assets and liabilities; audit working papers.

AUDITING (Professional Examination II):

AIM

The aim of the examination is to assess the extent to which students have acquired a sound knowledge of current auditing practice and procedures.

CONTENT

All matters included in the Auditing syllabus in the Auditing, Systems and Data Processing paper.

The provisions of the Companies Acts in so far as they affect the auditor and accountant; accounts including group accounts; reports for prospectuses; special provisions relating to banks and insurance companies; legal rights, duties and responsibilities of the auditor under statute and common law; the law relating to distribution of profits.

The Institute's Recommendations on Accounting and Auditing; Statements of Standard Accounting Practice and (when published) Standard Auditing Practice.

The requirements of the Stock Exchange relating to the admission of securities to quotation in so far as they affect the auditor and reporting accountant, reports on profit forecasts.

An appreciation of the application of statistical sampling techniques for audit purposes.

The principles of the audit of computer systems.

(b) Procedures and techniques:

(i) Principles of internal control.

(ii) Recording and evaluation of systems of internal control.

(iii) Testing and sampling.

(iv) The transactions audit.

(v) The balance sheet audit.

(vi) The audit of mechanical and computer based accounting systems.

(vii) The control and management of audits.

(viii) The use and significance of letters of engagement, management letters and audit verification certificates.

(c) The audit of all classes of accounts other than those of banks, insurance companies, investment trusts, trusts and executories, liquidations, nationalised undertakings and building societies.

PUBLIC ACCOUNTANTS AND AUDITORS BOARD

AUDITING:

(a) Thorough knowledge.

(i) Objectives:

Meaning of audit.

Primary objectives:

Statutory audits.

Other audit engagements.

Specialised objectives in regard to the various items in financial statements.

(ii) Planning and execution:

Initial planning.

Evaluation of internal control:

Purpose.

Methods employed in defining system, such as questionnaires and flow charts.

Effect of internal audit.

Determination of scope.

Audit programmes:

Purpose.

Preparation.

Limitations.

Audit working papers:

Audit of day-to-day transactions;

Vouching generally.

Procedural testing.

Verification of assets and liabilities, including physical inspection and oral enquiry.

Procedures necessary to expedite the presentation of financial statements.

Sampling techniques: Purpose, advantages and limitations of:

Judgemental sampling.

Statistical sampling.

(iii) Auditors' responsibilities:

Independence and objectivity.

Rights and duties:

Relevant provisions of the Companies Act and the Public Accountants' and Auditors' Act.

Relevant Court decisions.

Audit reports:

Unqualified.

Qualified.

Reports on unaudited financial statements.

Effect of events subsequent to balance sheet date.

Ethics and rules of professional conduct.

Statutory provisions with regard to appointment.

. . . (iv)
(iv) General:
Developments and changes in generally accep-
ted auditing principles and practices as
published in statements issued from time
to time by the Public Accountants' and
Auditors' Board, National Council of
Chartered Accountants (S.A.) and other
organised professional accounting bodies.
The application of audit procedures to
business investigations.
(b) Good working knowledge.
EDP Installations – See Annexure H.1.
(c) General knowledge.
The audit requirements of specialised under-
takings, such as-
banks;
building societies;
co-operatives;
friendly societies;
insurance companies;
pension and provident funds;
stockbrokers;
mortgage participations.
Prospectus reports.
Current development of and changes in
standard auditing practices and proce-
dures which are gaining popularity.
American Institute of Certified Public Accountants

Electronic data-processing systems and computers are chiefly treated in the auditing section as types of systems which the CPA should understand for audit purposes. Testing in this area will be at the level where candidates are required to demonstrate (1) a basic knowledge of a computer system, the general capabilities of the system, and the more universal terms associated with the computer; (2) the ability to design, analyze, and flowchart a system of modest complexity; (3) a general knowledge of the common commands used in computer languages sufficient to program, debug, and test a simple problem; and (4) an understanding of the control procedures and needed modification of auditing methods to conform to computerized systems and to audit using the computer.

Canadian Institute of Chartered Accountants

(a) Data processing systems:
   (i) Manual and mechanical processing;
   (ii) Computer processing systems.

(b) Computer capabilities:
   A non-technical understanding, emphasizing advantages and limitations, with particular reference to accounting applications.

(c) Programming:
   (i) Programming languages;
   (ii) Program development;
   (iii) Flow charting and development.

(d) Audit techniques for computer systems:
   (i) Impact of computer processing on audit techniques;
   (ii) Hardware controls, program controls and external controls over data processing activity;
   (iii) Audit of work processed at a data centre;
   (iv) Use of computer as an audit tool.

THE INSTITUTE OF CHARTERED ACCOUNTANTS IN ENGLAND AND WALES

AUDITING, SYSTEMS AND DATA PROCESSING

Aim

The aim of the examination is to assess the extent to which the candidates appreciate the nature, purposes and procedures of an audit in the particular context of the information systems of modern business and the ability to:

(a) evaluate systems from the standpoint of internal control and operating efficiency;

(b) understand and apply systems techniques;

(c) understand the functional, though not the technical, characteristics of business equipment and the principles involved in selection and use for particular purposes.

THE INSTITUTE OF CHARTERED ACCOUNTANTS

DATA PROCESSING AND SYSTEMS ANALYSIS

General Prescription:

The design, evaluation and control of various forms of data processing system for accounting and non-accounting purposes.
Elements of information systems of all kinds: input, processing and output; objects and methods of systems analysis; flow-charting; principles of systems design; internal control; systems specifications; principles of programming; documentation; control of installation projects.

(b) DATA PROCESSING AND OTHER BUSINESS EQUIPMENT:

Office methods and equipment: the functions (not the technical characteristics) and the principles of selection and use of different kinds of equipment such as mechanical and electronic accounting machines, computers and peripheral equipment; punched cards; paper tape; magnetic tape; software.

The principles of the audit of computer systems.

THE NEW ZEALAND SOCIETY OF ACCOUNTANTS

COST AND MANAGEMENT ACCOUNTING

PLANNING AND DEVELOPMENT OF DATA PROCESSING SYSTEMS:

(i) Systems investigation -
   (a) general background of information
   (b) existing data flow
   (c) information gathering methods
   (d) documentation of results of investigation

(ii) Systems analysis -
   (a) objectives of analysis
   (b) participation of operating personnel and management
   (c) analysis of inputs, outputs, processes
   (d) definition of future objectives to provide for growth and expansion
   (e) documentation of results of systems analysis

(iii) Systems design -
   (a) output of the system
   (b) input of the system
   (c) processing required to produce output from input
   (d) possible types of controls
   (e) forms design
   (f) coding system design
   (g) master file design
   (h) run structure
   (i) comparison of random access with sequential processing

AUDITING;

(The principles followed and techniques used in the examination of financial statements, including those prepared by electronic data processing systems.

THE INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS (ENGLAND)

MANAGEMENT INFORMATION SYSTEMS AND DATA PROCESSING (MISP)

Candidates will be asked to answer five questions out of seven.

AIM:

To study the theory and practice of management information systems, systems design and the computer as an integral part of such systems.

SYLLABUS:

Basic concepts of systems: deterministic, probabilistic, cybernetic.

The firm as a system composed of sub-systems: levels of information - operations, planning and policy making, information handling, communication theory. Feedback and control - closed loop and open loop systems; decision-making as information processing; models and simulation.

Development of management information systems: documentation, implementation, maintenance, flexibility and adaptability.

Systems design: objectives of the total system; contribution of each sub-system, avoiding sub-optimisation. Rationalisation of information flows, timing and accuracy. Outputs, destinations; effect of time lag; inputs. Deviations from standards.


Digital computers:

Hardware: Functions of the central processor, input devices, types of storage and their suitability for specific applications. Output display and transmission devices.


Systems analysis and design for computer applications. Selection of batch processing, on-line processing.

Feasibility studies and project planning and control. Processing policy - use of computer bureaux. Impact of the computer on company organisation, reporting methods, management practice etc.

THE SOCIETY OF INDUSTRIAL ACCOUNTANTS (CANADA)

DATA PROCESSING EQUIPMENT AND PROGRAMMING

The content of the course is descriptive and technical. It is designed to introduce the student to computers and programming and thus give him an understanding that will enable him to use and appreciate computers in the rest of the program.

.../LEVEL
LEVEL OF KNOWLEDGE

Students are expected to have a fair to good knowledge of computers and related equipment - how they operate and the accuracy necessary when addressing them. They should be able to write a simple program that would involve loops, a sub-routine, and a function sub-program.

The Development of Data Processing
The Computer and Its Components
Input, Output and Communications Flowcharting
Arithmetic Statements
Input and Output Branching
Loops and Subroutines
Computer Systems in Business Programming in Business
- Introduction
- Basic Terms Used in Programming
- The Competition Between Languages
- A Comparison of Languages
- Software for Retrieval
- Management Decisions
- Conclusions.

INFORMATION SYSTEMS: ANALYSIS, DESIGN AND IMPLEMENTATION

Building upon the student’s earlier exposure to programming and data processing equipment, the objectives of this course are (i) to develop an understanding of the concepts of system structure and design and to relate these concepts to the economic/financial information requirements, information flows, decision criteria and control mechanisms in the organization, and (ii) to emphasize the role of electronic data processing in analysis, design and implementation of information systems.

Level of Knowledge

Students are expected to have a good knowledge of the concepts of systems and the analysis and design of administrative systems. Concepts of interface, integration, common data banks, different types of systems (e.g., data processing and management information storage, retrieval and communication; and the techniques of analysis and flowcharting should be clearly understood.

INFORMATION SYSTEMS: ANALYSIS, DESIGN AND IMPLEMENTATION

Introduction to Systems
Systems Flowcharting and Block Diagrams
Concepts of Management Information Systems and Its Implementation
Analysis of Current Systems Costs and Problem Definition
Feasibility Study and Systems Selection
File Design and Forms Design
Systems Documentation
Data Base and Data Structures
Analysis of Computer Systems and Selection
Systems Study for the Acquisition of a Mini-Computer.

SUGGESTED SYLLABUS OF THE COMMON BODY OF KNOWLEDGE COMMITTEE OF THE NATIONAL COUNCIL OF CHARTERED ACCOUNTANTS (C.A.)

DATA PROCESSING

a. GOOD WORKING KNOWLEDGE:

(i) Systems analysis and design:
- The stages in a systems project, i.e. volumes, requirements, etc.
- Problems in the design of information systems
- Information specification, logic flowcharting and form design
- Alternative methods, i.e. handwritten, mechanical, punched card and EDP
- Management service function
- Procedure manuals

(ii) Automatic data processing (A.D.P.):
- Storage and retention of records
- Creation of input and output, including methods of capturing data
- Installation methods

(iii) Computer systems:

(a) Methods and terminology, including
- Feasibility; Systems analysis; Systems design; Input and output; Processing required; Controls; Forms; Coding; Creation and security of master files; Random and sequential access.

(b) Processing, including:
- Classification of computers; Basic hardware components; Central processing unit; Data representation; Operation; Peripheral units; Software and its importance; Implementation.

(c) Programming languages
- Function of different languages
- Elements of program development
- In respect of one high-level language:
  - Description; Instructions; Sub-routines; Data formatting and editing; Lables.
  - Program preparation
  - Program documentation

(d) Remote terminals and on line and real time applications
- Time sharing

.../b.
b. GENERAL KNOWLEDGE:
- Non-computer equipment capabilities
- Computer capabilities
- Applications and their advantages and disadvantages, including:
  - Simulation; Linear programming; PERT;
  - Forecasting; Inventory control;
  - Mathematical tool, e.g. Fortran;
  - Current developments in available equipment and techniques.

Public Accountants' and Auditors' Board
(Effective 1980)

(b) Good working knowledge.
The audit of EDP installations:
Effect of EDP on audit objectives and conventional techniques.

Hardware controls.
Software (Program) controls.
External controls over processing activities, namely file control, exception reporting, etc.
External controls over source and user departments.
Test decks: Their preparation, purpose, advantages and disadvantages.
Analysis of program logic.
Use of computer as an audit tool, e.g. audit program, loop program, etc.
Audit planning.
Implications of bureau applications.
Special audit requirements at the design stage: Audit files, printouts, etc.
THE CANADIAN INSTITUTE OF CHARTERED ACCOUNTANTS

MANAGERIAL ACCOUNTING AND CONTROL:

(a) Accounting information for product costing, including:
   (i) Absorption costing vs. direct costing;
   (ii) Job order costing;
   (iii) Process costing.

(b) Accounting information for planning, control and decision-making, including:
   (i) Internal control;
   (ii) Budgeting;
   (iii) Responsibility accounting;
   (iv) Standard costing;
   (v) Management control systems, including divisional performance measurements;
   (vi) Cost-volume-profit relationships;
   (vii) Relevant cost analysis;
   (viii) Capital investment decisions.

ASSOCIATED AREAS:

II The management process:

(a) Concepts in behavioural science that are pertinent to management, including basic human needs and motivation, communication, reactions to stress, change and resistance to change, innovation and creativity.

(b) Planning - setting objectives policy-making, long and short range planning.

(c) Organizing and co-ordinating.

(d) Mobilizing resources - personnel, finances, facilities.

(e) Directing and - human relations, supervision.

(f) Communicating and controlling - controls, feedback, corrective action.

THE INSTITUTE OF CHARTERED ACCOUNTANTS IN ENGLAND AND WALES

MANAGEMENT ACCOUNTING:

AIM

The aim of the examination is to assess the extent to which candidates are able to use and interpret the methods and techniques available in the financial management of organisations.

CONTENT

The collection, compilation, presentation, analysis and interpretation of financial data for use in the creation of management policy, in short- and long-term planning and decision-making, and in the control of the execution of policy and decisions at all levels of the organisation, and in particular:

(a) Design and organisation of management information systems, including the use of computer methods.

(b) Short- and long-term budgetary planning.

(c) Budgetary control, including the control of costs and revenue in detail.

(d) Analysis of costs and revenues for decisions, including those relating to capital expenditure and the financing thereof.

(e) Presentation of reports, including the design of forms and methods of presentation.

Candidates will be expected to understand the use in financial management of statistical and operational research methods and concepts as specified in the syllabi for Statistics (Foundation Examination) and Elements of Financial Decisions. Questions may be set on problems that can be solved by the use of these techniques, but they will not carry more than one-third of the marks for the paper.

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MANAGEMENT ACCOUNTING (4½ Hours in all comprising one paper of 2½ hours and one paper of 2 hours)

(a) Costs: the relationship of expenditure and resultant achievement to give cost, different costs for different purposes—fixed costs, variable costs, incremental costs, marginal costs, etc.

(b) Cost accounting: the operation and application to practical situations of all types of cost recording and cost control systems.

(c) Interpretation and reporting: interpretation of data and reporting to all levels of management; importance of prompt reporting; responsibilities for action.

(d) Financial planning: fund flow analysis; cash forecasts; profit projections; assessment of additional working capital requirements; effect of investment incentives and taxation on the appraisal of projects; advising on viability and on ranking within fund availability of capital projects; budgeting for and controlling capital expenditure.

(e) Profitability: optimisation of use of resources and of product mix; use of marginal and incremental techniques and the dangers involved; use of comparative ratios within an organisation and within an industry; the importance of the time/volume relationship of revenue and cost; value analysis.

(f) Economic factors: the effects of inflation or deflation on stock valuation, asset replacement policy, pricing policy and growth potential; the meaning of productivity and its importance.

MATHEMATICS AND MANAGEMENT:

(a) Management structures and resources: functions of the manager; management organisation structures; management planning and the use of the specialist services of market research, work study, organisation and methods; measurement of management performance.

PUBLIC ACCOUNTANTS’ AND AUDITORS’ BOARD

MANAGEMENT CONTROLS:

Note: The importance, from the point of view of management, of the interpretation of accounting records and of the use of information for policy decisions and control purposes is stressed.

(a) Thorough knowledge.

(i) Management accounting:

Objects, uses and limitations of accounting as a tool of management at all levels. Sources of information and types of control. The meaning and significance of variances.

Budgetary control:

Preparation of budgets. Calculation and explanations of variances.

Cost accounting:

The purposes of cost accounting and its relationship to the determination of profitability. Elements of cost, i.e. labour, materials, fixed and variable expenses. Various methods of Cost Accounting, e.g. standard, job, process, and their respective uses. By-products and joint products.

Developments of specific costing systems:

Techniques commonly employed. Procedures. Form design. Integration with financial records.

(ii) Analytical control:

Theory, practical application and significance of trends: Moving averages, exponential smoothing applied to increasing and decreasing trends. Theory, practical application and significance of return on investment concepts. Break-even analysis and correlation. Relationship between sales, costs and capital employed, including effects on profit margins of price variances, differences in volume, etc. Network analysis. Inventory control techniques.

(iii) Internal control:

Characteristics and purpose. Techniques commonly employed, including accounting controls, authorisation and division of duties. Significance and nature of internal audit. Significant features in relation to specific aspects of operations, such as — general organisation; cash transactions; sales, debtors’ accounts and receipts; purchases, expenses, suppliers’ accounts and payments; payrolls; stock and work in progress; fixed assets; securities.

(iv) General knowledge:

Current developments in available techniques.
AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS

While quantitative techniques applicable to professional accounting may appear in any section of the CPA examination, they more frequently appear in the Accounting Practice examination. Candidates may be tested on their knowledge of the accounting and other business applications of modern algebra (linear and non-linear), calculus (differential and integral), probability and statistics, and other applied mathematical techniques.

The recommended topics are:

1. Probability (Finite sample spaces)  10
2. Differential and integral calculus  (Functions of one variable)  39
3. Probability (Infinite sample spaces. Discrete and continuous)  19
4. Linear algebra  39
5. Analysis -
   (a) Functions of several variables, partial derivatives, extreme values of functions, Lagrangian multipliers, inequality constraints.  10
   (b) Complex numbers and exponentials Euler's formula, calculus of trigonometric functions.  9
6. Difference and differential equations  20
7. Computation
   (a) Orientation and use of flow diagrams  3
   (b) Teaching of a simple language  3
   (c) Working examples - tabulating a function, problems in probability theory etc.  7
8. Probability and statistics sequence
   (a) Integration  13
   (b) Moment generating functions  4
   (c) Sequences of random variables  5
   (d) Statistical Inference  20
   (e) Relationships and a set of random variables  4
   (f) Linear models  10
   (g) Design  15
   (h) Stochastic processes and review of Markov Chains  27
   247

CANADIAN INSTITUTE OF CHARTERED ACCOUNTANTS

QUANTITATIVE METHODS:

Level

(a) Mathematics of finance, including time, value of money, interest, annuities and evaluation of bonds and other securities  Two
(b) Basic statistics, including the graphical display of data, measures of central tendency, the use of regression and correlation analysis. (The probability portion includes elementary set theory, the fundamental rules of probability, the definition of random variable and the uses of the binomial probability distribution.)  Two
(c) Basic concepts of decision theory, linear programming and simulation.  One

THE INSTITUTE OF CHARTERED ACCOUNTANTS IN AUSTRALIA

STATISTICS

General Prescription:

Introduction to descriptive statistics and statistical inference. Elementary probability theory and basic ideas of survey sampling.

Detailed Prescription:

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>Level</th>
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<tbody>
<tr>
<td>Collection and presentation of numerical data</td>
<td>2</td>
</tr>
<tr>
<td>Frequency distributions</td>
<td>2</td>
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<tr>
<td>Measures of central tendency and dispersion</td>
<td>2</td>
</tr>
<tr>
<td>Elementary probability theory</td>
<td>2</td>
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<tr>
<td>The binomial distribution</td>
<td>1</td>
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<tr>
<td>The normal distribution and the standard normal area table</td>
<td>2</td>
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<tr>
<td>The sampling distribution of the sample mean</td>
<td>2</td>
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<tr>
<td>Point and interval estimation of a population mean using the normal distribution</td>
<td>2</td>
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<tr>
<td>Test of hypothesis on a single population mean using the normal distribution</td>
<td>2</td>
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<tr>
<td>Type I and type II decision errors</td>
<td>1</td>
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<tr>
<td>The simple linear regression relation and the correlation coefficient</td>
<td>2</td>
</tr>
<tr>
<td>Basic ideas of survey sampling</td>
<td>1</td>
</tr>
<tr>
<td>Price index numbers</td>
<td>1</td>
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<tr>
<td>The component elements of a time series and determination of the trend</td>
<td>1</td>
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THE INSTITUTE OF CHARTERED ACCOUNTANTS IN ENGLAND AND WALES

STATISTICS

AIM
The aim of the examination is to assess the extent to which candidates understand and can use the basic ideas underlying statistical methods, at an introductory level but avoiding superficiality, in order to provide a sound foundation of knowledge for the use of these methods in various aspects of the work of accountants.

CONTENT
1. MEASUREMENT AND DESCRIPTION
   (a) The nature of statistical data: Need for measurement; statistical description and structure; accuracy of data; outlying observations; sources of data.
   (b) Description of sample data: Classification; graphical presentation; histograms and frequency distributions; measures of location and variation and their calculation.
2. PROBABILITY AND SAMPLING
   (a) The meaning of probability; Rules for calculating the probabilities of complex events; mathematical expectation.
   (b) Random variables and probability distributions: Their nature and use; the concept of moments; the binomial distribution and its properties; normal approximation to binomial.
   (c) Sampling: Random sampling; modified random sampling; sampling distribution of the mean; standard error of the mean; small population sampling.
   (d) Index numbers: Purposes of calculation; selection of items; choice of basic period; choice of weights; methods of construction; use of indices in making valid comparisons.
3. INFERENCE
   (a) Estimation: Point estimates and confidence intervals; estimation of a population mean; estimation of unknown proportion in attribute sampling; estimation with large or small samples.
   (b) Testing hypotheses: Type I and type II errors; testing a mean; testing the difference of two means; testing a proportion; testing the difference of two proportions.
   (c) Correlation and regression with two variables: Scatter diagrams; linear relationships; least squares estimation of regression lines; standard error of estimates; correlation coefficient and its interpretation.

Candidates may be asked questions to demonstrate their understanding of the basic principles and assumptions of the methods covered by the syllabus, to show their ability to select appropriate statistical methods in the solution of particular problems, and by solving simple numerical problems to demonstrate their ability to use the methods.

The mathematical level of competence required at the commencement of study is that of the General Certificate of Education O-level syllabus in mathematics.

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF SCOTLAND

ELEMENTARY STATISTICS: description and presentation of statistical data; averages (mean, median, mode); measures of dispersion (standard deviation, mean deviation range, interquartile range); theoretical frequency distributions (normal, binomial, Poisson); logical basis of sampling theory (random and systematic, cluster); statistical inference (estimation and confidence intervals, testing hypotheses).

QUANTITATIVE TECHNIQUES -
   (i) Forecasting: elementary time series analysis; seasonal coefficients; exponential smoothing.
   (ii) Linear programming: graphical solution to two variable problems; the Transportation problem; limitations of the linear assumption.
   (iii) Networks: network construction; critical path method: project evaluation and review technique (P.E.R.T.) and uncertain durations; resource profiles.
   (iv) Decision making under uncertainty; mathematical expectation; decision trees.
   (v) Stock control: analysis and classification of stock and stock holding cost; the formula for economic order quantity (E.O.Q.); safety stocks re customer service.

NOTES
   (i) Candidates will be expected to have sufficient knowledge of how to carry out the arithmetic of a technique to enable them to derive a result interpret it and discuss the limitations of the technique.

SUGGESTED SYLLABUS OF THE COMMON BODY OF KNOWLEDGE COMMITTEE OF THE NATIONAL COUNCIL OF CHARTERED ACCOUNTANTS (S.A.)

GOOD WORKING KNOWLEDGE:

Introduction to Mathematical approach to problem solving; formulation of a model by optimising some objective function subject to specific constraints; importance of reducing 'axioms' to...
a minimum; discarding insignificant data; leaving flexibility in the model.

Concept of a function; arithmetic, geometric, binomial and exponential series; limits; derivatives and their application to the solution of maxima and minima; application of elementary calculus to business problems; differentiation, integration, Taylor's Theorem.

Compound interest and discounting formulas and their derivation.

Equalities and inequalities; matrix algebra; linear programming, including 'simplex' method.

Collection and tabulation of statistical data; approximation and limits of accuracy; analysis of statistical information and its interpretation in non-technical language; graphs and diagrams, including logarithmic graphs; decomposition of time series; index numbers.

Measures of central tendency; measures of dispersion; frequency distributions; shapes and parameters of classical distributions, such as normal, binomial, Poisson, exponential and rectangular distributions; simple curve fitting; simple correlation and regression.

Elements of probability theory and relation to set theory and integrating a function; addition and multiplication laws; permutations and combinations; conditional probability.

Sampling distributions; standard errors; confidence limits; the null hypothesis; significance tests based on the normal curve, Student's t-test, X² tests.

Use of sampling in business; stock control; quality control; sales forecasting.

THE SOCIETY OF INDUSTRIAL ACCOUNTANTS OF CANADA

BUSINESS MATHEMATICS

The course includes a review of algebra, use of charts and graphs, simple and compound interest, the application of compound interest to bonds, amortization and sinking funds, investment, decision making, and matrices.

Level of Knowledge

The student should have a good knowledge of basic algebra and be able to use investment tables, equations, charts and graphs, and matrices.

COURSE OUTLINE

Introduction to the course.

Exponentials and logarithmic functions.

Factoring

Solving linear equations in 1, 2 and 3 unknowns.

Word problems - i.e. how to set algebraic equations up, an application of the concepts of this lesson

Graphs and algebraic equations

Quadratic equations.

Notation - progressions; arithmetic, geometric inequalities (linear programming will be used as an example here).

Vectors

Matrices

Determinants

Solving linear equations using matrix algebra (inversion of 2 x 2 matrices only)

Ratio, proportion and percent

Simple interest, simple discount, cash discount

Compound interest and annuities

Annuities in arrear and deferred annuities.

Investment in bonds; extinction of debt, investment decision making

Sets and probabilities

Introduction to statistical methods

QUANTITATIVE METHODS I

Quantitative Methods I emphasizes mathematical concepts associated with discovering inner relationships (not superficially revealed in a problem situation). This course provides the foundation from which the ideas, principles and methods of mathematical techniques used in the second section of the course can be developed. To accomplish this, a broad range of mathematical topics must be considered and thus include algebra and aspects of analytical geometry, descriptive and inferential statistics, and set theory. A major portion of this section is devoted to inferential statistics and probability theory on account of its importance: the ability to form opinions, draw conclusions and even make predictions on the basis of observations, despite how incomplete they (observations) may be. From the study of this section, it is hoped that the student will (i) develop a facility with symbolic notation, (ii) be able to reduce complex problems to their significant elements, and (iii) to be able to express the relationships of these elements in quantitative terms.

Level of Knowledge

Students are expected to have a good knowledge of the introductory concepts involved in algebra and analytic geometry, descriptive and inferential statistics, and set theory.

Course Outline

Review of Algebra and Sets

Introduction to Statistics

Probability

Random Variables and Probability Distribution

The Binomial Model, Binomial Sampling

The Normal Probability Distribution

Estimation

Hypothesis Testing

Small Sample Theory

QUANTITATIVE METHODS II

Quantitative Methods II builds upon the concepts studied earlier and primarily deals with business problems that can be quantitatively expressed and solved. In essence, emphasis is placed on the model building process. The student is introduced to some of the more modern and sophisticated mathematical tools such as exponential smoothing, and directed to the understanding and methodologies of the above mathematical tools, their applications and limitations.
Level of Knowledge

Students are expected to have a fair to good knowledge of the applications of mathematical techniques to business problems and situations.

Course Outline

Quality Control
Regression and Correlation Analysis
Time Series Analysis
Decision Making under Uncertainty - The Linear Programming Model; The Simplex Method; Inventory Models; Limitations and Extensions of Economic Orders Quantity Model; PERT - cost; A Formal Statement of the Decision Problem; A Comprehensive Example; Other Decision Criteria; Bayes Theorem; The Machine Set-up Example; The Concept of Information; The Value of Information.

Decision Making under Uncertainty - Bayes Theorem; The Machine Set-up Example;
The Concept of Information; The Value of Information.

Simulation
- How to Generate Random Draws From a Probability Distribution
- Simulation of Firm's Budgeted Financial Statements
- Simulation Within an Optimizing Model
The course is substantively operational auditing oriented, as opposed to the traditional external auditing type. Operational Audits - functional, services and overall performance - are covered in fair detail. The framework, audit process and responsibility for conducting the operational audit, are envisaged to be conceptual in nature. To place operational auditing in perspective, the student is introduced to auditing theory and philosophy, which includes the nature of auditing, evidence, internal control and sampling (both judgment and statistical).

Level of Knowledge

Students are expected to have a fair to good knowledge of audit theory and philosophy. They should have a good knowledge of the conceptual framework and process of operational auditing and the application thereof to the audit of operations.

1. Introduction to Auditing
   - Accounting and Auditing Contrasted
   - Internal Auditing
   - Evolution of Internal Auditing
   - The Role of Internal Audit
   - The Statement of Responsibilities of the Internal Auditor
   - Liaison with Shareholder’s Auditor

2. Auditing Concepts, Standards and the Nature of Evidence
   - Reasons for the Internal Audit
   - Auditing Standards
   - Internal Control
   - Evaluating Internal Control
   - Audit Working Papers

3. Auditing the Information System
   - Nature and Importance of the Information System
   - Nature and Purpose of Operational Auditing
   - Identification of Operational Auditing Opportunities
   - The Information System
   - Internal Control
   - Examination of the "Review of Organizational Control"
     (a) Preparatory Work
     (b) Examination of Company Program
     (c) Examination of Specific Operational Activity
     (d) Conclusions Regarding the Review of Organizational Control

4. Flowcharting and Sampling
   - Introduction to Flowcharting
   - Introduction to Sampling

5. Using the Computer
   - Audit Approach to EDP
   - Characteristics of an EDP Audit
   - Criteria for Internal Control
   - Application of Audit Techniques
   - Around Versus Through the Computer
   - Generalized Audit Programs
   - Specific Applications
   - Extensions of the Computer Audit

6. Procurement and Production
   - The Procurement Cycle
   - Internal Control of Procurement
   - Audit Procedures: Procurement
   - Production and The Inventory Problem

7. Auditing the Marketing System
   - Scope of the Marketing System
   - Scope of the Marketing Audit
   - Assessment of Strategic Planning
   - Audit of Operational Planning
   - Monitoring Advertising Payoff
   - Evaluating the Salesperson/Advertising Balance
   - Confirmation from Customers
   - Compliance with Regulations

8. The Cash Management System
   - Introduction
   - Audit of Cash Planning
   - Receipts and Disbursements
   - Scope of Accounts Receivable
   - Centralization Versus Decentralization
   - Factoring
   - Bank Relationships

9. Auditing the Personnel System
   - Extent of the Personnel Audit
   - Employment
   - Labour Relations Regulations
   - Security and Safety
   - Personnel Data in the Information System

10. The Reporting Function
    - Report to Management
    - Structure and Content of an Internal Audit Report
    - The Reporting Process
BODY OF KNOWLEDGE FOR SECOND TIER

The Body of knowledge recommended for candidates in the second tier at the time of qualification should be a part of the wider body of knowledge envisaged for the newly-qualified chartered accountant. It is suggested that the study should comprise:

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<th>Subject</th>
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<tr>
<td>Accounting</td>
<td>2 University courses</td>
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<tr>
<td>Auditing</td>
<td>1½ University courses</td>
</tr>
<tr>
<td>Company Law, Mercantile Law and other Regulatory Legislation</td>
<td>1½ University courses</td>
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<td>1 University course</td>
</tr>
<tr>
<td>General Business Knowledge</td>
<td>1 University course</td>
</tr>
<tr>
<td>Comprehension and Communication</td>
<td>1 University course</td>
</tr>
</tbody>
</table>

A broad summary of the body of knowledge which would be obtained from this is as follows:

ACCOUNTING

(a) A good working knowledge in relation to commercial undertakings.

(b) A general knowledge of management accounting, cost accounting and financial analysis.

AUDITING

(a) A good working knowledge in relation to the audit of commercial undertakings.

(b) A general knowledge of current auditing techniques for E.D.P. installations.

COMPANY LAW, MERCANTILE LAW AND OTHER REGULATORY LEGISLATION

(a) A general knowledge of Company Law as related to the operation of companies and the rights and duties of directors and other officers.

(b) A general knowledge of Mercantile Law in relation to normal business transactions.

(c) A general knowledge of regulatory legislation other than Company Law.

TAXATION

A good working knowledge of South African Law and procedure.

DATA PROCESSING

A good working knowledge of current methods and systems, including automatic and electronic data processing.

GENERAL BUSINESS KNOWLEDGE

(a) A general knowledge of business economics with emphasis on practical applications relevant to the present day.

(b) A general knowledge of financing a business.

COMPREHENSION AND COMMUNICATION

Facility in concise and logical expression, both written and oral.
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