CHAPTER 6

POLICY IMPLEMENTATION MODEL FOR OUTCOMES-BASED EDUCATION

6.1 INTRODUCTION

Education became one of the principal tasks of the state in the Republic of South Africa. Therefore extensive provision had to be made by Parliament for education policy and its implementation. Various aspects of education policy and its implementation were dealt with in Chapters 2, 4 and 5 of this thesis. This chapter is devoted to policy implementation activities whereby objectives could be realised.

Apart from governmental policy directives on outcomes-based education, it is necessary to briefly explain the policy analysis techniques, the national curriculum statement, managerial functions, and monitoring and evaluation. The focus will be on how these matters would facilitate the successful implementation of outcomes-based education policy.

Models have been devised to ensure that future products are produced in time, with precision and without a waste of money. In this context, the primary intention is to propose an implementation model of outcomes-based education. The secondary aim is to apply the proposed policy implementation model to any new or modified public policy.

6.2 POLICY ANALYSIS TECHNIQUES

Although there are numerous policy analysis techniques which are both impressive and useful, only four of them will be explained. The four policy analysis tools in question are, according to Heinemann *et al.* (1997:43) –

❖   cost-benefit analysis;

❖   decision tree methods;

❖   simulations and models; and

❖   experimental analysis.

6.2.1   Cost-benefit analysis

Cost-benefit analysis is one of the basic requirements for effective policy analysis. In applying this evaluation method, one calculates the costs of the programme, then establishes its benefits. Thereafter, costs are subtracted from benefits. If several options are being considered, the one with the greatest net benefit should be selected. This axiom is referred to as the *fundamental role of cost-benefit analysis*. The following example illustrates how cost-benefit analysis is calculated. A study examining the effects of helicopter surveillance patrols on burglary rates in high-crime areas illustrates the essential elements of cost-benefit analysis. Adding patrol cars to such areas may have no apparent impact, but helicopters, which provide law enforcement officers with greater ability to see wrongful acts, might have a more significant impact on crime. The study indicates a reduction of crime rates with the introduction of helicopter patrols. The relevant question then becomes whether the reduction in crime is worth the programme cost. The table below summarises the basic data.

TABLE 6.1: HELICOPTER PATROL COST-BENEFIT ANALYSIS

	Daily
Cost of program	$126
Cost of burglaries during no-helicopter patrol periods	$494
Cost of burglaries during helicopter patrol periods	$161
Benefits	$333
Benefits to cost ratio: $333 / $126 = 2.6	

(Heinemann *et al.*, 1997:44)

On a cost-per-day basis helicopter patrols expended $126; benefits amounted to $333 per day, which is calculated as follows: cost of burglaries during no helicopter patrol minus cost of burglaries committed during helicopter patrol. The resulting ratio of benefits to costs was 2.6:1, indicating that, under the logic of the Fundamental Rule, the programme was justified (Heinemann, *et al.*, 1997:44).

Scott and Sechrest (1992:245) explain cost benefit in much simpler form. They state that to determine how one gains from an action, how much the action costs, and divide the former by the latter. A quotient greater than 1,00 suggests that the action is a good investment. They also concede that the actual situation is not that simple, and that many theoretical questions must be resolved in order to arrive at a useful cost-benefit analysis. Essentially, the theoretical questions centre on the necessity for obtaining benefits, and a theory of costs.

The theory of intervention provides an understanding of treatment. According to Lipsey (1990:36), if no theory of an intervention exists, then one cannot determine what to do when intervening. Most importantly, one does not know what a person does when attempting to extrapolate any evidence for the effectiveness of the intervention to some other group, setting or problem. For example, an intervention may appear to have an unacceptably low cost-benefit ratio, but that may be the result of having an intervention that has unnecessary issues attached to it that make it more expensive but not more effective. To further shed light on the example, the cost-effectiveness of screening for and remedying hearing losses among elderly veterans could be mentinoed. It was noted that the estimate of the cost obtained from the research trial was probably 33 to 50 per cent higher than would be necessary in a community implementation. The reasons have to do with the use of more expensive screening, data recording, equip-ment, and follow-up procedures in the research and the reliance on much more highly trained, expert personnel than would be required to implement the programme.

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The intervention theory assists in recognising that many social programmes overlap and complement each other. For example, health issues are affected by educational, occupational, and housing issues, yet often one of these programme areas may be funded by the elimination of other programme areas. Although a theory sufficiently comprehensive to illuminate all the connections among the many interventions that might be possible is probably beyond full comprehension at the present time, the difficulties involved in formulating one should not detract from the need to engage in such an exercise (Scott Sechrest, 1992:246).

Secondly, the theory of benefits is required in order to specify the benefits that are to be sought. In any evaluation, if sufficient independent outcome measures are analysed, some will prove to be significant by chance, which may lead to the possibility of erroneous inferences. In this regard Dales, Friedman and Collen (1979:389) provide a study of a multiphasic health-screening programme. After extensive analysis, it was found that the screening programme might have reduced deaths from complications of hypertension and colorectal cancer in older men. On account of lack of effective theory to account for the specificity of such findings as well as the problem of extensive analyses that were done, lives could not be saved. Therefore, judiciously applied theory can either limit the number of measures that need to be analysed, which is preferable, or help avoid erroneous inferences based on specious findings.

According to Scott and Sechrest (1992:247-250), the theory of benefits may take the functional form of effects, dynamics of benefits, negative benefits and intervention dynamics. These forms of benefits are briefly described below –

❖ functional form of effects refers to theory which is required to specify the structure or functional form of the effects;
❖ dynamics of benefits state that, in addition to assess benefits adequately, theory is needed as well as empirical observation to indicate whether effects are likely to snowball, dissipate, or simply to have an incremental effect;

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❖ negative benefits refer to giving a full account of the benefits of any intervention including negative benefits, that is, detrimental as well as positive benefits; and

❖ intervention dynamics refers to detailed theoretical knowledge about the effectiveness of components of treatment necessary to anticipate the way in which the intervention will actually be carried out in the field in order to estimate the potential social benefits of some intervention.

Thirdly, and lastly, the theory of costs is necessary for guiding analyses of the costs of intervention. Major questions that hinge on a proper understanding of the intervention have to do with start-up and evaluation costs from those that would be operating costs in a long-term implementation. For example, an experimental intervention to be evaluated might be carried out by specialised personnel trained to a much higher level than would be required for operational implementation. A suitable theory of intervention would enable one to determine what level of personnel at what cost should be attached to estimates of programme operating expenses for cost-benefit accounting purposes (Krause & Howard, 1976:298).

Research has indicated that there are a number of difficulties with the method of cost-benefit analysis. Some of them are obvious, such as the problem of putting rand figures on intangibles like quality of life, value of human life, or the benefits of beauty, although these are often assessed indirectly. For example, a value of human life can be calculated from the rate of awards in wrongful death cases that go to trail (*The South African Treasurer*, 1973:79-80).

There are challenges in evaluating benefits and costs. There are uncertainties in relation to the choice of the investment criterion, in selecting and ranking alternative investment projects and in making allowance for uncertainty. Consequently, the degree of skill to be applied in cost-benefit analysis is high and will stretch the abilities of the analyst in bringing the various factors into account, not only in determining market prices but in applying estimated prices according to the needs of the case and the constraints of the situation (*The South African Treasurer*, 1973:79-80).

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Another noteworthy obstacle in the use of quantitative measurement is the uncertainty often associated with social issues. It stands to reason that more systematic treatment can be given to known than to unknown probabilities. It is not always clear what the facts really are; therefore, costs and benefits calculated under conditions in which probabilities are not known will surely not be as reliable as desired. In this regard Wildavsky (1966:296) states that the cost-benefit analyst must learn to live with uncertainty, for he/she can never know what changes may occur in policy and in technology. This is not a counsel of despair, on the contrary, it is an admonition of the need to be sensitive to uncertainty.

The future can be an imponderable complicating factor in the cost-benefit calculations of the analyst. In theory, through discounting, it is possible to incorporate the future in cost-benefit analysis. In practice important questions remain. Firstly, and most apparent, the future is opaque and not easily predictable; hence, there is often built-in uncertainty in considering the future. Secondly, as a result of the previously mentioned concern, consequences in actual practice are often not seriously weighed. An example of these problems is as follows. In the private sector, weighing costs and benefits tend currently to be tied to short-term thinking. A tendency to focus on the importance of immediate profits relegated basic research and capital investment to lower priorities. This is one reason for the competitive success of Japanese firms against their American counterparts. Many of the former have a future orientation and are willing to forgo present profits for longer-term profits. In the semi-conductor industry, for instance, American firms have seen their share of the market drop markedly as the Japanese attention to long-term planning and investment had resulted in sophisticated products and a co-ordinated market strategy. Recently, American industry began to recognise that maintenance of a competitive position in the world economy requires planning that employs a much longer time horizon than that based on investors' demands for short-term profitability. Other possible contributory factors to these different approaches of the Americans and Japanese, may be different discount rates as well as cultural differences (Heinemann *et al.*, 1997:45).

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Cost-benefit analysis, with its emphasis on measurement and tangible factors has enjoyed wide popularity with policy analysts. These characteristics may be viewed as limitations in the evaluation of public policy. Undoubtedly in some ways, the use of cost-benefit analysis can be a hindrance to long-range planning or commitment. This shortcoming is derived from its insistence on quantifiable measures as well as its inherently incremental bias. The cost-benefit approach used in the area of public policy usually stresses costs over benefits. The reason for this inclination is that various public programmes in areas such as health, education and environmental protection produce intangible benefits that are not quantifiable, although their rand costs are readily calculated.   From the political point of view, cost-benefit analysis is politically debilitating for it tends to saddle leaders with the onus of costs when their actions may have averted major disasters. Citizens can be affected by the costs of public measures designed to prevent serious misfortunes such as a natural disaster, enemy attack or economic depression, but they may experience no noticeable benefits if the measures taken are successful. In these instances, unfortunately, leaders may be punished by the voters for their lack of foresight. Notwithstanding, careful analysis of social problems remains an especially useful approach, and knowledgeable and responsible public leaders would be well advised to consider its findings (Heinemann *et al.*, 1997:47).

A problem in applying cost-benefit scales of evaluation is that one must contend with the many intangible consequences of public policy. Some programmes aim at increasing the participation of the poor or any other special class of people in the planning and administration of local programmes that may carry over into increased political demands for other benefit and services. Although this intangible consequence is difficult to measure, it may affect future policy decisions. Therefore, the symbolic and intangible results of public policies cannot be ignored in any thorough evaluation analysis, and it is likely that they will be assigned a value as favourable or unfavourable, even though they are difficult to measure (Dubnick & Bardes, 1983:215).

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Despite its shortcomings cost-benefit analysis appears to be an objective and value-free technique. Contrariwise, basic values are built into it. The fundamental rule demands that the most efficient alternative be selected. Maximisation of goods or services in quantifiable terms, usually in rand, guides decisions when applying cost-benefit analysis. This, in turn, devalues or de-emphasizes the many factors involved in the process by which decisions are made. By de-emphasizing these factors, utilitarian values tend to eclipse or outweight or override other concerns. Although cost-benefit analysis is exceptionally valuable for clarifying and arranging alternative ways of approaching problems, it is by no means to be considered value free (Heinemann *et al.*, 1997:47).

Despite the aforementioned problems, cost-benefit analysis is not useless. On the contrary, it has considerable potential and is frequently used in analyses that require precision, consistency and reliability. In the case of the analyses of the effects of outcomes-based education, it would be possible to establish the costs of the policy and gauge the benefits derived therefrom. However, it should be borne in mind that financial costs would only reflect the monetary requirements to implement the policy. The human resource cost should, for example, also be calculated. Similarly various intangible results, not only direct competency improvements, could be derived. This is the area of interest regarding cost-benefit analysis.

6.2.2   Decision analysis

The second technique of policy analysis which will be discussed is decision analysis. This technique is used when decisions must be taken sequentially and where uncertainty is a critical element. One common technique of decision analysis which is used under these conditions is called the *Decision Tree*. The following example will indicate clearly how the concept of the decision tree is applied in practice. The choice between the cost per month of purchasing a new car as compared with the purchase of a used car provides a simple example of this approach. The figure below represents a decision tree for purchasing a car.

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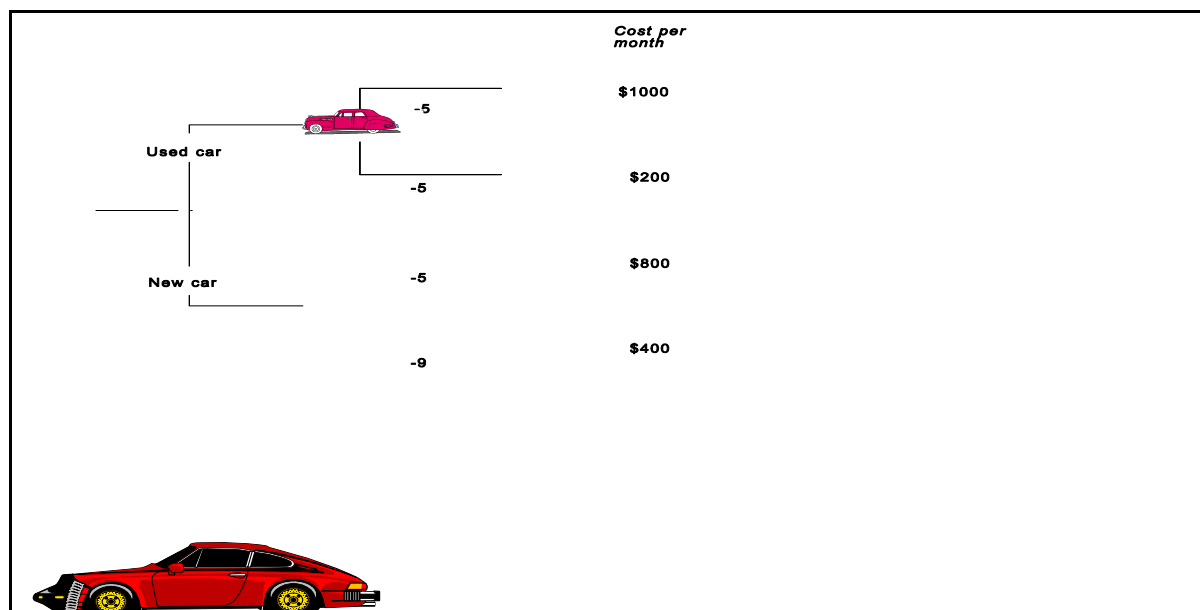
(Source: Heinemann *et al.*, 1997:48)

Figure 6.1: Decision tree for purchasing a car

In this example there is firstly the decision node to determine the courses of action open to the decision maker; and secondly the node to overcome the uncertain events which could affect the possible outcomes. Cost per month associated with purchase of a used car (a) versus a new car (b) probabilities associated with each outcome; and payoffs, the consequences of each possible combination of choice and chance. The Expected Monetary Value (EMV) of buying a used car (EMV/a) is the average of the sum of each choice multiplied by the adds of the different choices. Simply calculated, for a used car in this case, EMV/a = .5 (1000) + .5 (200) = $600. For a new car, EMV/b = .1(800) + .9(400) = $440. From the two possible choices, the better choice would be to purchase a new car, since the expected monetary cost ($440) in this case, is less than that of acquiring a used car ($600 per month) (Heinemann *et al.*, 1997:48).
 In other words, to maintain a new car by applying the formula will be much cheaper. Reference to prior research indicate that it is cheaper to maintain a new car than an old car.

One immediate question about this technique is the set of quantitative assumptions

undergirding each decision choice. Although, estimates and costs associated with the array of choices are straightforward in the example above, decision trees are often constructed when there is considerable uncertainty about root assumptions.   In complex situations, branches representing various choices can be added at a geometric rate, which will make the final result dependent upon estimation. In this regard Welch and Comer (1983:266) state that decision tree analysis seems to be a more useful heuristic device than a yardstick by which a final decision should be measured. Experience in dealing with decision trees indicates that failure rates of systems and other risks are often severely underestimated, which reduces the benefits to be derived from this form of calculation.

A problem of using decision trees is that it is not always easy to identify all relevant branches of the decision tree. This may result in some alternatives being ignored, especially in complex situations. For example, the Rasmussen Reactor Safety Study, making use of event-tree analysis and fault-tree analysis, methods similar to the decision tree approach, cost $4 million over three years. In spite of the thoroughness with which the study was conducted, within a short time after its completion it was severely criticised because of its flawed methodology and assumptions. This criticism indicates the need for any analyst to retain a critical posture in the application of analytical techniques (Lowrence, 1985:142-149). In case of the implementation of outcomes-based education policy, there are many branches such as human resources, textbooks, audiovisual aids, and classrooms to be budgeted for.

Values which apply to the decision tree method are parallel to those underlying the cost-benefit analysis. The decision tree method is outcome-oriented and hence reflects utilitarian values. On the surface this method seems to be more future-oriented compared to cost-benefit analysis; this is incorrect. Probability and cost estimates are essentially based on current understandings, and efficiency is a built-in value. Therefore, it should be accepted that values play a critical role in the decision tree method (Heinemann *et al.*, 1997:49).

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The major difference between the decision tree technique and the cost-benefit analysis is that the former adapts more easily and usefully to decision situations where monetary units are not particularly important. For example, decision tree analysis can be applied to military strategy or other situations where one has to assess the probability of an opponent's response. Another example could be natural disasters threatening human life or health and other situations where decisions could be formed by the nonmonetary probabilities associated with each choice alternative. It is worth noting that decision tree analysis continues to be limited by the exclusion of other possibilities once particular choices are articulated in the calculation and by the tenuous/insignificant nature of estimated probabilities. These estimates are analogous to votes of participants in the analysis rather than the reflections of the possibilities of actual occurrences (Lowrence, 1985:122)

For the purpose of evaluating outcomes-based education, the decision tree could be utilised. In this regard it would be required to identify the various alternatives, establish the linkages and indicate how the particular choice was justified.

6.2.3   Simulations and models

The third technique of policy analysis is the application of simulations and models. These techniques represent attempts to create the equivalent of a laboratory setting to determine the likely outcomes of various policy choices. The result is a prediction in the following form: Given conditions X_1 through X_2, policy choices A_1 to A_2, will have impacts Y_1 to Y_2. With this information at the disposal of the policy analyst, he/she will select the option that seems best, normally the most cost effective option. Computers and software packages are used to carry out simulations and models. The aim of these techniques is to develop more rational control over decisions and to increase the chances that the policy adopted will be an efficient choice (Heinemann *et al.*, 1997:50).

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Governments have increasingly purchased computer software models to rationalise the budget making process. The computer models, which are known as Fiscal Impact Budgeting Systems, forecast government service needs and both expenditure and revenue needs over the next year and subsequent years. The data base for projection includes previous expenditure and revenue levels, demographics, intergovernmental funding relationships, and predicted changes in each of these parameters. Therefore, the Fiscal Impact Budgeting Systems can be rightfully regarded as a classic management science response to a fundamental policy problem, which is developing more rational control by elected officials and the general public over decisions that affect the fiscal position of government. They are promoted because they contribute improving information processing, content, and flows thereby representing a potential tool for managerial rationalism (Kraemer & Dutton, 1982:190).

Just like cost-benefit analysis, modelling draws heavily on phenomena from economics, especially in areas involving budgeting. Admittedly, other models are not based on economic assumptions, for example, those making use of engineering principles. Many of the questions raised about this instrument of policy analysis are familiar. There is uncertainty in decision situations, and computer simulations tend to oversimplify reality and are based on artificial assumptions. Be that as it may, this is an outcomes-oriented technique and reflects utilitarian premises (Heinemann *et al.*, 1997:50-51).

In the application of the simulations and models technique, some challenges are encountered. For instance, while the number of policy alternatives examined must be limited to be manageable, political bias often determines the boundaries of choices. More often than not, public officials specify that they want a choice about just A and B. For instance, a choice between traditional outcomes-based education and transformational outcomes-based education. Such an arrangement, obviously, produces a pre-arranged result if one of the options is preferable to the other. The unfortunate tendency is for the political preferences of public officials to encourage manipulation of the simulations and models technique. However, experience has shown that political pressures on elected officials produce short-term thinking that can overwhelm the

results of policy analysis or lead to skewing of analyses for political ends. Notwith-standing, overt political concerns, the analyst must make initial choices in modelling. The overriding factor is that he/she remains responsible and aware of the ramifications of these choices for future policy decisions (Heinemann *et al.*, 1997:51).

The three policy analysis techniques explained thus far are amenable to manipulation through control of the choices of alternatives to be considered making all three of the techniques vulnerable in the policy process. Fortunately, students of policy analysis are fully aware of the possibilities in this respect and caution that the legitimacy of policy analysis depends on everyone playing by the rules. With regard to cost-benefit analysis they note that outright deception can involve submerged assumptions, unfairly chosen valuations, and purposeful misestimates, and add the caveat that any procedure for making policy choices, from divine guidance to computer algorithms, can be manipulated unfairly. Besides the aforementioned problems, it has been discovered that these techniques, even if applied by the most fairminded and circumspect of analytical technicians, will involve opportunity costs. They will de-emphasise or omit certain possibilities or opportunities on their formulation. Although these techniques can be subjected to the powerful hydraulic forces of the political system, there are insufficient guarantees that they will be able to withstand skewing and twisting for partisan purposes, even if the use of technical committees specially designed for quality control and review may provide some barrier to such skewing. Organisations under pressure to undertake projects may find themselves tempted to underestimate their costs and ignore valuable alternatives for the sake of winning legislative approval. Which are both regrettable and unfortunate (Buchanan & Flowers, 1975:183-184).

6.2.4 Experimental analysis

The fourth technique of policy analysis is experimental analysis. In using this technique the policy analyst would examine results from quasi-experiments or true experiments to determine the best course of action. True social experiment relies on random assignment of subjects to an experimental group receiving the services of the programme

being tested and a control group not receiving those services. Usually, experiments are conducted with pilot or demonstration studies to determine if the experimental pro-grammes should become general policy. Should those assigned to the experimental group benefit more than those in the control group, it can be concluded that the pro-gramme has had a positive benefit, i.e. if the programme works or is a success. The quasi-experiment proceeds without random assignment of subjects and is procedurally less rigorous. Although quasi-experiments are often the best available technique given the constraints of particular situations, they cannot produce results with the same level of validity as those from the more rigorous experimental design. It should be noted that the experimental analysis technique attempts to apply the scientific method of the natural sciences to the social sciences, especially sociology and political science (Heine-mann *et al.*, 1997:52).

An impressive array of policy experiments have been carried out from the 1960s, which include various income maintenance (negative income tax or guaranteed annual income) experiments, housing allowance programmes, aid to families with dependent children adjustments, and voucher-type plans for educational expenses. The ostensible goal of these policy experiments has been to use results from these pilot studies to assist in designing more effective education programmes on a large scale. In these instances, the policy analyst can base policy recommendations on actual experiments carried out in a real world environment (Henneman *et al.*, 1997:52).

According to Scott and Sechrest (1992:254), determining the benefits of different evaluation strategies depends on the determined perspectives. Evaluations using experimental designs, with random assignment produce more definite results, but they often take too long, are too expensive, and can cause political problems. These issues need to be addressed by those involved in the evaluation. What is important in these social experiments is whether the benefits in terms of the society as a whole are worth more. The answers depend upon factors such as the size of the programme, its usefulness to society, and what the alternatives are. Eventually, randomised experi-ments will be less costly in terms of putting funds into programmes that work.

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Apart from the problem of full experiments taking much time to complete as well as opponents of programmes using experimental techniques as a way of delaying action on a major commitment until it can be safely curtailed, there are other problems. They include the difficult task of getting sufficient participants, the resistance of prospective subjects to being experimented upon, the tendency of experimental programmes to drift (that is to evolve over time and change) and render uncertain how the programme actually affected people, and the question of external validity (that is, how generalisable to other settings are the results of a particular social experiment?) (Greenberg & Robins, 1986:340).

In addition to the aforementioned technical issues, this technique of experimental analysis also experiences ethical problems. For example, to construct a tight experimental design, one can withhold services from some while supplying them to others? Therefore, ethical considerations prevent a wide variety of experiments on humans. When ethics was ignored, as in the Tuskegee quasi-experiments of the 1930s, in which a group of over 400 blacks was not treated for syphilis in order to study the disease's progress, over decades, the result was grotesque and a violation of the subjects' human rights (Heinemann *et al.*, 1997:53).

Other problems that the experimental analyst is faced with are related to interpretation and subjectivity. For instance, the initial steps of defining a social problem to be examined must reflect someone's normative perspective. Secondly, the selection of kinds of intervention raises the problem of opportunity costs in that this decision will eliminate further consideration of other forms of intervention. Thirdly, interpretation of the results of a social experiment admit a wide variety of views, and analysts from different normative perspectives may agree on the substance of the findings but differ sharply on whether the proposed social intervention was a success (Heinemann *et al.*, 1997:53).

6.2.5   Policy analysis techniques: implications for policy implementation

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From the above consideration of policy analysis techniques, it is clear that numerous difficulties could be encountered. However, this does not discredit the technical procedures described. On the contrary, the aim is to warn against them in order to enhance the chances of successful application of experimental analysis.

The four techniques of policy analysis described above can contribute significantly to the implementation of outcomes-based education policy.

Firstly, the technique of cost-benefit analysis can be used to indicate whether a policy intervention will be successful. Or, to indicate whether any policy intervention is worthwhile. This technique, as described earlier, is calculated by dividing the cost of the programme that is to be intervened by the cost benefits to be derived from the intervention. Any quotient that is greater than 1,00 means that the intervention is beneficial.

It is possible to cost the introduction of outcomes-based education policy. It is also possible to obtain an estimation of the cost of benefits to be derived from the introduction of outcomes-based education policy. If the quotient of the cost of benefits divided by the cost of the implementation of outcomes-based education policy is greater than 1,00, the intervention will be beneficial. Only beneficial interventions should be encouraged and entertained because they contribute to the improvement of the quality of life of people.

Not all benefits are positive. There are negative or harmful benefits. According to Spady (1999) as quoted by the National Qualifications Framework (NQF) and *Curriculum2005* a South African Qualifications Authority (SAQA) position paper, outcomes-based education is about a consistent, focused, systematic, creative implementation of four principles; namely, a clarity of focus on the learning outcomes, the design-down approach to building the curriculum, high expectations and expanded opportunity. From the aforementioned description of outcomes-based education, it could be argued

that its implementation could yield positive benefits (SAQA, 2003:4-5).

The application of the cost-benefit analysis technique reveals deficiencies such as uncertainty associated with social problems. The future is unpredictable, however, the insistence on tangible benefits and the possibility of encouraging the public to demand more benefits after participating in some social intervention programmes may require quantifiable techniques such as cost-benefit analysis. Undoubtedly cost-benefit analysis as a technique of policy analysis is a useful tool. It can be applied to measure the degree of success of the implementation of the outcomes-based education policy. This is due to the fact that it indicates the cost of implementing outcomes-based education and the value of the benefit to be derived.

Secondly, just like cost-benefit analysis, the second technique of policy analysis, which is *decision analysis*, can be used in the implementation of outcomes-based education policy. There are three types of outcomes-based education, *viz.*, traditional, transitional and transformational. These three types are courses of action open to the decision makers. The last type of outcomes-based education, transformational outcomes-based education, was chosen for South Africa because it could serve as a vehicle to change both the social and political life of the country to meet the requirements of a democratic system of government. (See Chapter 2, section 2.7.)

It is difficult in some instances to identify the branches of a decision tree as it is not always possible to exhaust the list of alternative policy choices. For example, at present three types of outcomes-based education have been identified. It is possible, through research, that in the near or distant future other types of outcomes-based education could be identified, thus increasing the branches of a decision tree. It may also increase the possible alternative policy choices for social intervention.

Thirdly, simulations and models as techniques of policy analysis could contribute to the implementation of outcomes-based education. A technique could serve as an equiva-

lent of a laboratory setting to determine the likely outcomes of various policy choices; in fact, it could encourage the making of choices based on given conditions and policy choices. This technique should use computer and software packages to carry out simulations and models. Governments could use this technique to rationalise the budgeting processes. For instance, the implementation of outcomes-based education policy is a costly matter. It involves the overhaul or re-engineering of the entire education system. Money will be needed for education and training of pre-service trainees, rewriting of the new curriculum, provision of teaching and learning aids, provision of additional classrooms, rewriting of textbooks, education and training of both governing bodies and school managers and education and training of examiners. In order to prepare a budget that will address these needs, the simulations and models technique of policy analysis will prove to be very useful, because it is able to forecast government service needs and expenditure and revenue needs over a year to several years.

Fourthly, experimental analysis can be used in the implementation of outcomes-based education policy, because with this technique the analyst would examine results from quasi-experiments or true experiments to determine the course of action. This technique is applied by providing social services to an experimental group while the control group is not given those services. In fact, this technique stresses the need and importance of conducting pilot projects to determine whether the experimental programme should become general policy. The major benefits to be derived from conducting pilot projects is that they give one the idea of costs involved, identification of short-comings, duration of full implementation, education and training needs, and the advisability of implementation or discarding the introduction of the new policy. Therefore, pilot projects should be conducted before any new or modified public policy can be implemented. The same applies to the outcomes-based education policy.

Although there are advantages to be derived from the experimental analysis technique, the main disadvantage is ethical considerations. It is a serious ethical problem to provide social services to an experimental group and deny the service for the control group. However, in order to determine the benefits to be derived from an introduction of a public policy, it is imperative to subject an experimental group to it and not the control group. It is the only way in which the effects and impact of the new or modified public policy can be established. Therefore, the usage of pilot projects is an unavoidable and necessary factor to contend with.

The preceding explanation indicates how policy analysis techniques can be applied to the implementation of outcomes-based education policy. It is now prudent to describe the *National Curriculum Statement* which served as the major foundation for outcomes-based education policy for South Africa.

6.3 THE NATIONAL CURRICULUM STATEMENT

The *Constitution of the Republic of South Africa*, 1996 (Act 108 of 1996), provides the basis for curriculum transformation and development. Education with appropriate curricula have an important assignment; namely, to realise the provisions of the Constitution. Of paramount importance is that the curricula should develop the full potential of each learner as a citizen of a democratic South Africa.

6.3.1 Outcomes-based education

Outcomes-based education is prescribed as the foundation of the curriculum in South Africa. The main aim will thus be to enable all learners to achieve their maximum potential. To achieve the envisaged outcomes there will have to be a learner-centred and activity-based approach to education. The revised National Curriculum Statement builds its learning outcomes for the General Education and Training Band for Grades R-9 on the outcomes that were inspired by the Constitution (Revised National Curriculum Statement Grades R-9 Schools Policy, 2002:1).

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An important perspective of outcomes-based education is that it does not only concern curriculum change. Its envisaged impact is much wider; namely changing the nature, character and function of the entire education system. On account of the fact that outcomes-based education aims at overhauling the education system, it is bound to challenge current practices of curriculum development and delivery. However, it must be emphasised that the focus of outcomes-based education is primarily about systemic change and not curriculum change (SAQA, 2003:4).

Outcomes-based education spells out the critical outcomes and also requires the for-mulation of developmental outcomes which envisage learners who are able to perform particular actions. These were explained in Chapter 2, section 2.8.8.

6.3.2 Revised National Curriculum Statement: Learning Areas Statements

The Revised National Curriculum Statement: Learning Areas Statements were discussed in Chapter 2, section 2.8.10 (a).

6.3.3 Revised National Curriculum Statement: Learning Programmes

The purpose to be served by the Revised National Curriculum Statement: Learning Programmes is to promote commitment and competence among educators who will be responsible for their own learning programmes. To ease the burden on the shoulders of educators, the Department of Education provides policy guidelines based on each learning area. If need be the provinces charged with school education will develop further guidelines to accommodate diversity (Revised National Curriculum Statement Grades R-9 School Policy, 2002:2).

Principles and values underlying the Revised Curriculum Statement: Learning Areas Statements form the basis of the learning programmes. On the one hand the learning areas stipulate the concepts, skills and values to be achieved on a grade by grade basis.

On the other hand learning programmes specify the scope of learning and assessment activities for each phase. Moreover, learning programmes contain work schedules that specify the pace and sequence of these activities each year, and examples of lesson plans to be implemented in any given period (Revised National Curriculum Statement Grades R-9 School Policy, 2002:2).

To illustrate or to shed light on the aforementioned points, in the foundation phase, there are three learning programmes; namely, literacy, numeracy and life skills. In the intermediate phase, languages and mathematics remain as individual learning programmes. The schools are at liberty to develop other integrated learning programmes, on condition that approval of provincial departments of education is granted. Provinces themselves have the authority to develop province-wide decisions on combinations in the intermediate phase. In the case of the senior phase there are eight learning programmes based on the learning areas. In addition, time allocations for each learning area are uniformly prescribed for all grades and phases (Wilkens, 1999:46, 57 & 59-60).

6.3.4   Time allocations

Time allocations are calculated as percentages of the hours that are to be devoted to formal teaching. In each of the five days of a school week, educators are at school for 35 hours. Time allocated for formal teaching varies in the different grades. For instance, in the foundation phase there should be 22,5 hours of teaching in Grades 1 and 2, and 25 hours of teaching in Grade 3. The intermediate phase (Grades 4 to 6) should contain 26,5 hours of teaching. Last, but not least, in the senior phase, Grade 7 will have 26,5 teaching hours and Grades 8, 9 and 10 will have 27,5 hours of teaching (Revised National Curriculum Statement Grades R-9 School Policy, 2002:3).

6.3.5 Assessment

Each learning area statement includes a detailed section on assessment. Outcomes-based education uses assessment methods that are able to accommodate divergent contextual factors. Assessment according to the outcomes-based education policy has been explained in detail in Chapter 5, section 5.3.

6.3.6 Envisaged educator

The kind of educator that is envisaged by the outcomes-based education policy is described in detail in Chapter 4, section 4.7.

6.3.7 Envisaged learner

The kind of learner that is envisaged by outcomes-based education policy is explained at length in Chapter 4, section 4.7.

6.3.8 The national curriculum statement: Implications for policy implementation

The South African National Curriculum Statement is in fact a detailed, in-depth and comprehensive explanation of what the policy of outcomes-based education is all about. It explains outcomes-based education, learning areas, learning programmes, time allocations, assessment, the kind of educator envisaged as well as the kind of learner envisaged.

Much as it is impossible to solve an unknown problem or to travel to an unknown destination, it is equally impossible to implement an unknown public policy. Since the national curriculum statement explains clearly, in unambiguous terms, the public policy of outcomes-based education, it is possible to comprehend what it means and how it

should be implemented. Therefore, the Curriculum Statement is a clear policy state-ment which facilitates the implementation of outcomes-based education.

6.4 MANAGEMENT OF THE IMPLEMENTATION PROCESS

For any public policy to be successfully implemented, preparatory work needs to be thoroughly done. This entails, amongst other things, management directives for the implementation process. Some of the relevant matters are satisfactory personnel and financial provision, procedural prescriptions, control and managerial functions. These are explained hereafter in the order in which they are mentioned above.

6.4.1   Human resources

It is a truism that the prime asset of a country is quality citizens. This could lead to excellent employees as invaluable assets for successful policy implementation.

Every public institution should seek effectiveness through satisfactory recruitment, placement, pay, and fair treatment of its employees. Government employees should be selected, placed, promoted, and paid on the basis of their competence to work effec-tively and efficiently. Besides, there should be protection from victimisation and other unfair labour practices. There must be career growth through education and training. Employees should be appraised periodically to establish how their performance could be improved (Rosenbloom, 1986:194). Although each of these functions are valuable for the purposes of this thesis, the following aspects of human resource management will be explained:

- ❖ Leadership;
- ❖ Position classification;
- ❖ Training and development;

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- ❖ Utilisation of personnel; and
- ❖ Ethics in the public service.

(a) *Leadership*

A true leader may be defined as a person who is able to unite people to pursue a goal. Leadership is the personal qualities and abilities of a person to influence a group to perform satisfactorily in specific situations (Simon, Smithburg & Thompson, 1950:102).

Leadership, amongst other things, contains aspects of management. There are other functions that leaders perform besides planning, organising, directing, and control, which are four functions constituting management (Cloete, 1997:191). In addition to performing the aforementioned functions, leaders have to satisfy individual needs as well as group needs. The former needs arise from when a leader gives his/her followers something that they want in exchange for something that he/she wants. That is, it is a barter of sorts in which both sides gain and neither side loses. The latter needs are a result of the fact that each group is faced with group tasks (Kellerman, 1984:79-81).

Although some leadership qualities are innate, others are acquired and sharpened by learning and experience. On account of the fact that leadership is the rational ability to make a group more effective, more productive, it can be taught and learned (Clark & Clark, 1990:5). In addition leadership thrives because of superior intelligence and experience. That is, proper qualifications and relevant experience influence followers to accept the leadership of the experienced leader (Simon, Smithburg & Thompson, 1950:102).

According to Cloete (1997:192), leadership, as one of the groups of functions of human resource utilisation, consists of those functions which must be performed specifically to make employees work to the utmost of their physical and mental capabilities, namely –

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❖   communicating with the employees;

❖   directing or commanding;

❖   constructing work programmes; and

❖   conducting suggestion schemes.

Another function of personnel utilisation is inspiring employees. That is, leaders will always have to ensure that each worker performs to the utmost of his/her abilities. This is also referred to as motivating employees (Cloete, 1997:192-193). In this regard Lucas (1987:67) concurs with Cloete (1997:192-193) when he states that the overriding principle is that individuals are motivated to perform tasks for which they are rewarded.

To stress the importance and power of leadership Adair (1988:22) states that it requires understanding, courage, single mindedness, drive and an ability to persuade and lead others. He continues that other key matters that could affect leadership are:

❖   the calibre and knowledge of leaders;

❖   capacity to grow and change, to progress along planned lines to upgrade the professional and technical capability of the people;

❖   the ability of leaders to be evident at every level of the organisational structure;

❖   leadership strategy.

In the case of implementing outcomes-based education leaders are required to motivate educational employees to adopt the policy and give effect to it. Similarly leaders have to exhibit enthusiasm for the policy to obtain support by the implementers of the policy.

(b) *Position classification*

Position classification is a foremost aspect of human resources management. It is the system of designing jobs, organising them into useful managerial and career categories,

and establishing their remuneration. A well-designed position classification system provides a convenient inventory of every activity of a public employee. The position classification system indicates the work actually done according to established rules. The classification system, according to Rosenbloom (1986:194-195), should be based on the following principles:

❖   Positions and not individuals should be classified.

❖   The duties and responsibilities pertaining to a position constitute the outstanding characteristics that distinguish it from or make it similar to other positions. Some of the classification factors used concern the nature and variety of the work; the nature of the supervision received by whoever is occupying the position; the nature of the work; the originality required; the purpose and nature of person-to-person work relationships; the scope and nature of decision making; the nature and extent of supervision over other employees; and the qualifications required.

❖   The individual characteristics of an employee occupying a position should have no bearing on the classification of the position.

❖   Persons on the same position level should have the same kind of duties and responsibilities.

To illustrate what position classification is all about it is useful to think in terms of categories of positions – such as executive; administrative, professional, and technological; clerical, office machine operator, technician; and trade, crafts, and manual labour. Within each of these broad categories would be hierarchies of positions. Each of these positions would bear a classification and a rank. The rank would be related to remuneration (Miewald, 1978:217).

Position classification informs managers and employees what the occupants of each position would be able to do. It makes it possible to design career paths for employees as well as facilitating testing applicants for competence. Moreover, it provides a basis for evaluating the performance of the employees. At the same time position classification can be problematic because it is dehumanising the employees. On the one hand,

the job is designed and classified without regard to the employee who holds it. On the other hand, the organisation is viewed as a set of positions that are co-ordinated in some fashion, through hierarchy. An employee may be able to contribute more to the organisation than required by the position he/she is in allows. That is, the employee can neither operate beyond the level of work required in the position nor fall short of it. In reality, the employee is treated as a cog that is forced into a machine, not as an individual human being who forms part of an organisation (Rosenbloom, 1986:195-196).

(c) *Training and development*

The need for formal training for employees need not be overemphasised. However, where an entire system or ways of doing things are changed, it is acutely needed. To give effect to proposed changes or to enhance the level of efficiency and productivity, employers need a diversity of training and development programmes. It therefore follows that every employer should devise relevant and appropriate training and development programmes to satisfy specific needs.

No employee will be able to perform his/her duties properly from the outset without suitable training. Although on-the-job training will always have to take place, this type of training cannot satisfy all the needs of workers. Therefore, public authorities should prepare proper training programmes that will address the training needs of each category of workers. It is preferable that training be provided by ordinary educational institutions because they already have all the facilities as well as the expertise (Cloete, 1998:238). For example, technical colleges and technikons (now universities of technology) can assist in training apprentices and technicians.

It is a prerequisite that all public workers should be in possession of appropriate educational qualifications. The authorities could thus request educational institutions to present programmes for training recruits for specific professions. For example, they may request universities to provide appropriate degree courses for public administrators and engineers employed on specialised work in the public sector, police, income tax officials,

public prosecutors, educators and other occupational groups employed solely by the public authorities (Simon, Smithburg & Thompson, 1950:ix).

Cloete (1977:126) maintains that the central personnel institution should take the lead in conceiving training schemes. Although larger institutions may employ training officers, it is advisable that supervisors should do most of the training because they are ideally placed to identify the needs of the workers. Currently the South African Management Development Institute performs this function on behalf of the Department of Public Service and Administration.

In order to address the training needs of its workers, an institution should undertake a training audit. Training programmes should constantly be adapted to the changing circumstances. Training should not only be provided once, specific provision should also be made for retraining workers to prevent them from clinging to obsolete practices (Cloete, 1977:126).

On promotion, officials are required to do more complex work. This implies that their knowledge and skills should improve in keeping with the demands of their new positions. Therefore, it is necessary that specific provision should be made for this aspect of staff development. In fact, public officials should undergo continuous educa-tion and training. The potential of each public official may be developed to the benefit of the employee as well as the employer. It must be emphasised that the supervisors should play a key role in identifying development needs and in satisfying these needs. If they are unable to address the development needs of their subordinates, they should request assistance of appropriate educational institutions (Cloete, 1997:150).

(d) *Ethics in the public service*

Public servants, like all other employees, are required to respect specific guidelines that govern their conduct when carrying out their work. These guidelines, derived from the body politic of the state and prevailing values of society, are the foundations of public administration. Moreover, the guidelines should provide the content values for the ethos and culture of government and public administration in a democratic state (Cloete, 1998:91).

Public administration ethics should address some considerations, which, according to Rosenbloom (1986:478) are –

❖   basic honesty and conformity to law;
❖   avoidance of conflict of interests;
❖   service orientation and procedural fairness;
❖   democratic responsibility;
❖   public policy determination;
❖   compromise and social integration.

Concerning the role to be played by the public manager with respect to ethical standards, Stewart (1984:14-22) states that the manager should –

❖   consider competing interests;
❖   experience informed moral judgement regarding the balance of these interests;
❖   purposefully use the premises underlying that judgement as the guide to adminis-trative action.

Pursuant to the ideal of rendering public services and attain goals in a responsible, accountable, efficient, effective and fair manner, public servants need to observe codes of ethics. Codes of ethics prescribe guidelines for the conduct of professional workers

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or public servants, for example, the Code of Ethics for councillors and for officials prescribed by the *Local Government: Municipal Systems Act*, 2000 (Act 32 of 2000) (Cloete, 1998:114).

Despite their intentions, codes of ethics are not generally accepted as effective instruments for bringing about ethical behaviour of public servants. Be that as it may, it is necessary that public servants should be bound to conduct themselves beyond reproach in the performance of their functions and in private life. Therefore, it is imperative to prescribe enforceable codes of ethics wherever possible and to include them in the education and training programmes of government employees (Cloete, 1998:114).

(e) *Human resources: Implications for policy implementation*

It is accepted that the foremost asset of any organisation is its employees and their superiors. An institution is established to serve a specific societal need or needs. In order for it to attain its predetermined public objective, it must have supervisors and subordinates who are committed, motivated, educated and trained, and willing to serve the public. That is, activities do not just take place, people are responsible to see to it that functions are performed. Therefore, the human element is central to the success or failure of any organisation in fulfilling its mandate. Stated differently, in order to implement any public policy successfully, the personnel must play a crucial and decisive role.

Teaching is labour intensive. Each classroom and grade level is allocated a particular number of learners and educators. Besides learners and educators, there are school managers, district managers and subject advisors, who support the former group. Hence, the successful implementation of any public policy on education, in particular outcomes-based education, is entirely dependent on the commitment of the afore-mentioned functionaries.

From the above-mentioned arguments it is clear that good leadership is needed to give guidance to educators and learners. Moreover, leadership is responsible for creating an enabling environment that will make it possible for both educators and learners to achieve stated objectives. Furthermore, leadership should see to it that the sub-ordinates are motivated to perform tasks assigned to them, and to obtain and maintain the motivation level in the units for which they are responsible. That is, leaders are entrusted with the responsibility to ensure that public policy objectives are met. It is their duty to ensure successful implementation of outcomes-based education policy.

Teaching as a profession dictates that people who provide it must have specific academic and professional qualifications. On account of information explosion and outcomes of research, information and knowledge that are currently valuable, could be obsolete within a limited period. Hence, the need for in-service training. Ongoing training and development is needed to fill the gaps created by information explosion and research. Besides, from time to time, new public policies are introduced, and the functionaries who are to implement them need training and education. Consequently, training and development are needed to implement outcomes-based education.

Teaching is not only concerned with imparting knowledge and skills to learners, but also with character formation. Hence, ethics and accountability are essential ingredients of education. In fact, both of them are instrumental in combatting the enemies of public administration, which are corruption and maladministration. Therefore, in pursuit of refining learners' characters and personalities through education, they must be taught ethics and accountability. It also follows that ethics and accountability play a pivotal role in the implementation of outcomes-based education.

Although there is a directorate responsible for outcomes-based education policy, all posts of educators – vacant as well as new – are filled in taking into account other con-siderations. Be that as it may, the directorate is responsible for producing "Teacher's Guides for the Development of Learning Programmes" for each subject that is taught in

schools. The purpose of the guides, according to the Revised National Curriculum Statement Grades R-9, Mathematics (2003:1) are to –

❖   provide the essential features and underlying principles of a Learning Programme;
❖   promote and encourage adherence to the Revised National Curriculum Statement and support for its implementation;
❖   provide a framework for teacher development and training.

6.4.2   Financing

Public institutions, just like all other undertakings cannot function or be up and running without money. However, public institutions are dependent upon the citizens for their income through taxation or payments for services rendered. Consequently, legislative directives must be followed in the procurement and expenditure of money in the public sector, for example, the *Auditor-General Act*, 1995 (Act 12 of 1995) (Cloete, 1998:191).

In order to understand the financing of the state or institutions within an outcomes-based education framework, it is necessary to look at the following aspects –

❖   organisational arrangements;
❖   budget; and
❖   control.

(a)   *Organisational arrangements*

Separate groups of public servants are needed for separate and unique activities. These employees may be placed in groups to form institutions. Stated differently, organisational arrangements are made to perform different state functions. For instance, the collection, banking and expending of public money are important functions in any civilised community. Therefore, it is sensible that in the course of time

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clarity will have to be obtained about the organisational arrangements needed for dealing with public funds (Thornhill, 1985:76).

In the public sector, the legislatures top the hierarchy of public institutions, including those which are responsible for collecting, banking and expending public funds. Hereunder are the political office-bearers who head the executive institutions, each of which has its own hierarchy of appointed officials. Normally, a specific institution is created at the executive level to serve as a centralised initiatory and directive institution in regard to financial matters. In other words, to provide the political executive office-bearers responsible for financial matters as well as the administrative executive institutions with factual information, advice and instructions. Such a centralised financial institution is the Department of Finance and it supervises as prescribed the financial activities of the executive institutions (Cloete, 1998:191-192).

Pursuant to its objective of implementing outcomes-based education policy, the National Department of Education established a directorate specifically responsible for the implementation of outcomes-based education policy. The directorate is responsible for the production and distribution of teacher's guidelines. In addition, the directorate conducts workshops to assist educators in understanding and implementing outcomes-based education policy.

(b) *Budget*

A budget as an administrative tool has specific functions to perform. Firstly, it has a financial control function. This function emphasises the responsibility of administrators to give effect to only officially approved policies and practices. Furthermore, it aims at the elimination of the corrupt and irresponsible use of public funds. Secondly, it has a managerial control function. In this regard the executive uses the budget as a tool to ensure that government action is carried out in the most efficient manner. Thirdly, and

lastly, it has a strategic planning function. This involves the establishment of goals for society and choosing ways and means of attaining those goals in a world of scarce and limited resources (Schultze, 1968:1).

It is imperative for governments to identify and also establish their sources of revenue. They cannot simply print unlimited numbers of banknotes and expect them to remain valuable. They can borrow unlimited funds from private parties, but repayment will be required while interest will have to be paid on outstanding amounts. Borrowing causes debt which must eventually be paid. The options of printing money and unlimited borrowing are unrealistic solutions. Taxation ranks high as a source of revenue for governments. The following definition of tax clearly indicates its function. Tax is a compulsory contribution levied by the state to finance the provision of general public services (Cloete, 1977:205), such as the purchase of textbooks, audiovisual equipment, and the printing and dispatch of "Teacher's Guide for the Development of Learning Programmes" that facilitate the implementation of outcomes-based education policy.

Before a budget can be drawn up, some preliminary work needs to be done. According to Henry (2001:209), budgets can be categorised as –

- ❖ line-item budgeting with its control orientation;
- ❖ Planning-Programming-Budgeting, with its economic planning orientation;
- ❖ Management-by-Objectives, with its emphasis on budgetary decentralisation;
- ❖ zero-base budgeting, with its stress on ranking programme priorities;
- ❖ top-down budgeting, with its centralising and legislative overtones; and
- ❖ budgeting for results.

Only the first two categories of budgeting will be explained.

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(i)   *Line-item budgeting*

A budget is structured in such a way that each line on a sheet of paper has an item on the left side followed by a cost on the right side. As a result, the traditional budget acquired its descriptive title of "line item". A line-item budget, according to Henry (2001:211), is the allocation of resources according to the cost of each object of expenditure.

The line-item budgeting strategy came about as a result of some forms of pressure. Firstly, pressure came to bear as a result of the drive to establish a consolidated executive budget. The intention of this pressure was to oust financial corruption in government by consolidating public management bureaus under the chief executive. Secondly, pressure came as a result of the administrative integration movement, which advocated the functional consolidation of agencies, the abandonment of various independent boards, and the enhancement of the chief executive's appointive and removal powers, among similar reforms designed to assure efficiency and coordination in government. Thirdly, pressure was exercised as a result of the desire of political reformers to build in administrative honesty by restricting the discretionary powers held by public administrators. Consequently, innovations such as centralised purchasing, standardised accounting procedures, and expenditure audits emerged (Henry, 2001:211).

Line-budgeting will survive because budgets must, fundamentally, indicate how much each item costs, and the line-item budget does this. Research has indicated that four-fifths of American cities still use this traditional format, although many do so in conjunction with another type of budget format, especially through the performance or programme budget. However, the absence of abstraction inherent in, and the simplicity of, the line-time budget does not render it suitable for larger purposes, and it is best used at the lower level of the organisation. Occasionally, this is not fully appreciated by executives, and when it is not, use of the line-item budget can result in micro-

management at the macro level (Lewis, 1988:7).

(ii)   *Performance budgeting*

Performance budgeting, also known as programme budgeting, emphasise budgeting by way of identifying programmes, or stressing agency performance and measurement. In practice, it does both, thus it is defined as a system of resource allocation that organises the budget document by operations and programmes, and links the per-formance levels of those operations and programmes to specific budget amounts (Henry, 2001:213).

Performance budgeting cover more administrative activities than the line-item budgeting did. Unlike in line-item budgeting, outputs as well as inputs are considered. Thus, budget officers consider their mission not only as one of precise and controlled accounting, but rather as the development of programmes classifications – description of an agency's programmes and its performance, and the exploration of various kinds of work/cost measurement. Performance budgeting is considered to be managerial, as opposed to accounting, as skills are stressed and activities of the institution are given precedence over the purchase of items required to run the institution, management responsibilities become centralised, although planning responsibility remain dispersed, policy-making remain incremental, and the role of the budget agency evolved from a fiduciary to an efficiency function (Henry, 2001:213).

According to the *South African Survey* (2000/01:276), in 2000/01 an amount of R50,7 billion was allocated to the National Department of Education. It was projected that the amount allocated to education would increase to R53,7 billion in 2001/02, and R56,5 billion in 2002/03. The budget had to cater for all the activities of the Department as well as the activities of the nine provincial education departments. It was up to the provincial education departments to decide on how much had to be allocated for the implementation of outcomes-based education policy.   For   example,   the *Intergovernmental Fiscal Review* (2001:15) indicated the amounts budgeted for for the

provision of education in all nine provinces, *viz*: R46.947 billion for 2001/02, R50.164 billion for 2002/03, and R53.335 billion for 2003/04. It is worth mentioning that the bulk of the provincial education departments' expenditure goes to human resources. For instance, in 2000/01 57,3 percent of the budget was spent on human resources (*Intergovernmental Fiscal Review*, 2001:21). Table 6.1 indicates human resources expenditure for education by province:

TABLE 6.2: HUMAN RESOURCES EXPENDITURE FOR EDUCATION BY PROVINCE

R million	Actual			Estimated actual	Medium-term estimate		
	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04
Eastern Cape	5 850	6 031	6 371	6 771	6 956	6 988	7 352
Free State	2 265	2 388	2 472	2 674	2 812	2 970	3 137
Gauteng	5 153	5 289	5 345	5 841	6 268	6 765	7 171
KwaZulu-Natal	6 531	6 503	6 721	7 535	8 273	8 753	9 338
Mpumalanga	2 289	2 434	2 587	2 788	2 853	3 015	3 220
Northern Cape	732	746	773	814	872	928	978
Northern Province	4 988	5 469	5 401	5 871	6 025	6 468	6 727
North West	2 875	3 018	3 129	3 403	3 393	3 555	3 728
Western Cape	3 412	3 374	3 318	3 542	3 764	3 932	4 082
Total	**34 095**	**35 252**	**36 118**	**39 237**	**41 215**	**43 376**	**45 734**

Both line-item budgeting and performance budgeting are the tools that lend themselves to budgeting for education activities. As far as the implementation of outcomes-based education is concerned, these forms of budgeting offer techniques that are relevant and useful. Therefore, knowledge gained with these forms of budgeting would be instru-mental in drawing up budgets for the implementation of outcomes-based education policy.

(c) *Control*

After the approval of the budget by the legislature, a start can be made with imple-
menting the programme of work provided for. Money voted to finance the work to be
done can be used. On account of the fact that money voted is in fact estimated
amounts and cannot be used without reason, specific requirements must be satisfied
before any voted money can be released. On receipt of the voted money by an
authority, control has to be exercised over the way in which money is kept pending
payment of accounts, and also over the way in which actual payment is made. For this
purpose, specific instructions are issued. Various rules apply in this connection for all
central levels of government in the Republic of South Africa. For example, the *Consti-
tution of the Republic of South Africa*, 1996 (Act 108 of 1996), provides *inter alia* as
follows:

> 2.1.3(1)   There is a National Revenue Fund into which all money received by the national
> government must be paid, except money reasonably excluded by an act of
> parliament.

Over and above the provisions of the Constitution, there will always be further legisla-
tion on financial affairs to direct the financial activities of the executive institutions. In
this regard the *Public Finance Management Act*, 1999 (Act 1 of 1999), is particularly
significant. This Act provides *inter alia* as follows:

> 11 (1) The National Treasury is in charge of the National Revenue Fund and must enforce
> compliance with the provisions of section 213 of the Constitution.

The *Public Finance Management Act*, 1999 (Act 1 of 1999), provides further in section
11(4) that –

> 11 (4) The National Treasury must establish appropriate and effective cash management
> and banking arrangements for the National Revenue Fund.

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Furthermore, the Act prescribes how money must be banked, how approval may be obtained for authorised expenditure, how money may be borrowed, and how books and accounts must be audited.

It must be emphasised that the implementation of the budget should not be regarded solely as a financial matter. Neither the aforementioned provisions of law nor all the other instructions that are issued on financial matters will ensure that the set objectives are realised and the programmes of work carried out satisfactorily. Only if resources are not wasted, will there be financial efficiency in rendering goods and providing services to the community. That is, corruption which is the problem of officers using taxpayers' money to reward themselves. Hence, the need for stringent financial control through the application of administrative principles and the installation of appropriate organisational structures and processes (Henry, 2001:170-171).

Control of schools, in general, and the management of the implementation of outcomes-based education policy, in particular, is the responsibility of school governing bodies. On the one hand, the *South African Schools Act*, 1996 (Act 84 of 1996), empowers school governing bodies for public schools. Section 37(1) of this Act also requires the school governing bodies to be responsible for the collection and expenditure of school funds. Therefore, school governing bodies, by implication, are responsible for financing of outcomes-based education policy-related activities. On the other hand, section 6(3) of the *Employment of Educators Act*, 1998 (Act 76 of 1998), provides that the school governing body should recommend an educator to be appointed, transferred or promoted – which implies that the school governing body is responsible for appointing educators to implement outcomes-based education policy (*South Africa Yearbook*, 2000/01:430-431).

(d) *Financing: Implications for policy implementation*

No institution can run its affairs without money. Each institution has a specific mandate or mandates to fulfil. For this to happen different tasks have to be performed by employees. These tasks may involve the usage of particular equipment, time and space. All of these factors can be costed and be expressed in monetary terms. Money is needed to keep institutions and their units up and running. The Department of Education and its constituent units, including schools, need money to perform the tasks assigned to them. Implementation of outcomes-based education policy requires money.

An effective tool that is used by the leadership of any institution or unit to finance its operations is a budget. It provides for items that will be needed to perform the tasks assigned to the institution or unit, and estimate the expenditure for a specific period – normally a year. This information is crucial for the running and maintenance of every institution. Any new assignment that is given to an institution or part of it must be costed and funds must be made available in advance or periodically as the task that has been given is embarked upon. Otherwise, the given mandate will not be discharged because of lack of money. The principle of costing the implementation of a new public policy also applies to outcomes-based education policy. Thus, a workable budget is crucial in implementing outcomes-based education.

On account of the importance of a budget, attempts have been made to develop different budgetary strategies, for example, line-item budgeting, performance budgeting, planning-programming-budgeting, management by objectives, zero-base budgeting, top-down budgeting and budgeting for results. The major objective of these budgetary strategies is to obtain maximum benefit from limited financial resources. Hence, these strategies are also helpful in the implementation of outcomes-based education policy.

Control over collection, banking and expenditure of funds is central to the success of an institution. Nevertheless, control of expenditure in terms of an approved budget is equally important. It ensures that items that have to be purchased are bought satisfactorily, services that are required are paid for and that public goods that are to be produced are produced satisfactorily. Budget control ensures that a public policy is implemented satisfactorily. Hence, budget control can enhance the chances of successful implementation of outcomes-based education policy.

6.4.3   Procedural arrangements

After policy has been formulated, the organising and financing functions have been completed, and personnel appointed, the function of service delivery can commence. To attain a public policy objective, functionaries need to cooperate. However, these functionaries may hold conflicting views on how to perform a specific task. To ensure that everyone in a specific organisational unit cooperates in attaining the policy objective and does not waste time in the process, it is essential for a specific work procedure to be laid down for each task. Hence, work will be done efficiently, timeously, using the minimum amount of labour, and cost effectively (Cloete, 1998:248).

From the above, is it necessary to explain how work procedures develop, why formal work procedures are necessary, factors that necessitate the revision of work procedures, and delivery functions.

(a)   *Development of work procedures*

In order for an individual to perform a completely new task, he/she has to devise a method to perform that task. From time immemorial human beings developed work procedures to do numerous tasks. These procedures have been developed also for education to serve as the foundations for vocational education and training, for example, for accountants and bookkeepers. For the implementation of outcomes-based

education policy, both learners and educators must have specific ways of learning and teaching respectively.

In general, it is the responsibility of all workers, particularly supervisors, to devise and perpetually improve work procedures. It is also noteworthy that specific functionaries should be appointed to improve current work procedures. These functionaries should possess appropriate personal qualities to perform their task as well as being able to apply the various aids and techniques developed for this purpose (Public Service Commission, 1971:129). School principals and heads of academic departments receive training on how to improve educators' work procedure.

There are two types of work procedures in the public sector. Firstly, there is the procedure to be followed when the government decides to embark on a new course of action.   The government has the option of encouraging private individuals or enterprises to do the work on its behalf on certain specified conditions. To this end the government may issue licences or permits stipulating the objectives. The government has the option of dealing with the matter itself, in which case it may be entrusted to an existing public institution such as a state department, a public corporation or a municipal authority. Alternatively, a new institution may be created specifically for this purpose; this is the procedure that could be followed in dealing with the diverse sections of the public sector (Cloete, 1998:249).

(b) ***Necessity for formal procedures***

It is standard practice that at least two functionaries are engaged in any particular sphere of activity, such as rendering a service or supplying a product to the community. Therefore, there should be a clear procedure to be followed in doing the work to ensure that each makes a constructive contribution to achieve the objective. These work procedures determine the manner and speed with which a service is rendered or a product supplied (Cloete, 1998:250).

It is imperative that steps should be taken to rationalise work procedures on a con-
tinuing basis; where necessary the procedures should be prescribed with printed
manuals and codes for the following reasons (Public Service Commission, 1971:129-
131):

❖   to prevent a confusing multiplicity of work procedures because individual officers
     serving in a team may each have a personal way of doing a particular task;

❖   to ensure that officials work to attain the set objective and to prevent differences
     of opinion about what has to be done to reach the objective;

❖   to ensure that clear work assignments are given to individual personnel members;

❖   to bring about effective and efficient work performance and to permit the exercise
     of control to ensure that the supply of the products and the provision of services
     satisfy all requirements of quality and quantity;

❖   to explain the policy and the objectives to the personnel to ensure that all
     understand how their work is connected with the work of their colleagues;

❖   to ensure uniform and integrated action in matters where more than one institu-
     tion, department, branch or unit is involved;

❖   to make the personnel aware of new work procedures in an orderly manner;

❖   to ensure that all new personnel receive appropriate training;

❖   to ensure that work procedures are examined and revised in an orderly manner;

❖   to provide authoritative codes/manuals to regional, local and other workplaces;

❖   to provide specific instructions on how to exercise delegated powers; and

❖   to ensure that members of the public are kept informed about how to make the
     best use of the services that public institutions provide as well as the products that
     they supply.

In the case of outcomes-based education policy guidance is provided by the "Teacher's
Guide for the Development of Learning Programmes" that is subject-specific. The Guide
provides information about work schedules and lesson plans, development process and
assessment.   In addition, the directorate responsible for the implementation of

outcomes-based education policy conducts workshops to assist educators to implement outcomes-based education in different learning areas (*Revised National Curriculum Statement Grades R-9: Mathematics*, 2003:1).

(c) *Factors that necessitate the revision of procedures*

It is a fact that every aspect of the administration of a country is in a continual state of flux, especially as far as work procedures are concerned. By taking into account the factors that necessitate change, specific changes in work procedures can be anticipated. It is then possible to prevent procedures from becoming obsolete. The factors that necessitate changes in work procedures, according to Cloete (1998:253-256), are:

❖   Firstly, the needs of the people. Since constant changes take place in human society, new relationships develop continually between individuals and groups. Therefore, it follows that the authorities have to adapt their policies, organisational arrangements and work procedures continually to ensure that they keep pace with the changes taking place in society. The authorities will then be able to continue playing a meaningful role in society.

❖   Secondly, technological progress, which is a feature of the twentieth century, necessitate the revision of work procedures. The aeroplane and the motor car are some of the striking manifestations of technological progress, but the less spec-tacular developments, such as improved office machines, have had far-reaching effects on the work methods and procedures of public institutions.

❖   Thirdly, great scientific progress in all the sciences, physical as well as social, also contributed to the need to revise work procedures. A manifestation of this pro-gress is the spectacular increase in the number of technology and university stu-dents. In the public sector greater use is being made of persons with higher education qualifications. New fields of work are constantly being given to profes-sional and technical officials.

❖ Fourthly, the development of the administrative/managerial sciences also contributed to the need to revise work procedures. The training and development of supervisors performing administrative/managerial functions in the public sector have received increasing priority. The discipline Public Administration and other social sciences are drawing increasing numbers of researchers. This academic awakening has led to the renovation of organisation systems and work procedures in the public sector.

❖ Fifthly, and finally, the prevention of discrepancies, deviations and obsolescence also necessitate the need to revise work procedures. This is so because the administration of a country is undertaken by numerous institutions, some of which are so large and have many branches, divisions, sub-divisions and sections as well as regional and local workplaces. The institutions and their units have to change to provide for new need. Division of labour and specialisation occur and this results in a multiplicity of institutions. Changes are implemented in each institution as the need arises. However, the authorities sometimes forget to make consequential adjustments in related fields. The result is overlapping and or duplication of activities. This state of affairs has necessitated the appointment of commissions of enquiry to enquire into the organisation system, the work methods and procedures of public institutions and to make recommendations on how they should be adapted in the light of changed circumstances.

(d) *Procedural arrangements: Implications for policy implementation*

Any public policy has the connotation of inaction as well as action on the part of government through its organs of state, citizens as well as organisations and institutions. For instance, on the one hand, the policy of no smoking in public buildings indicates inaction, that is, people are barred from smoking in public buildings. On the other hand, a policy on compulsory schooling up to a certain age indicates action, which is, parents are legally bound to see to it that their children attend school. Therefore, a public policy is analogous to a verb, it indicates action or lack of it.

From the aforementioned nature and character of public policy, it follows that the public policy of outcomes-based education also indicates action by government, schools, teacher training institutions, school governing bodies, district managers, school managers, educators, learners and parents. Action implied in policy implementation does not take place haphazardly or in a disorderly fashion. On the contrary, it occurs systematically, orderly and controllably. For this to happen, procedural arrangements are crucial in policy implementation. Therefore, work methods and prescribed pro-cedures are central to the implementation of the public policy of outcomes-based education.

6.4.4   Control and accountability

A fundamental requirement of public administration in any state is that the population is the highest authority and that functions performed by the government and its officials should be beneficial to the majority of the citizens, individually and collectively. On account of the fact that the population cannot exercise the required authority, the legislative, executive and judicial institutions were created and staffed by functionaries to satisfy community needs. The population gave the functionaries authority to perform their respective functions. Be that as it may, the people must exercise control to ensure that the functionaries use their powers to further the well-being of the community (Cloete, 1978:265).

Control in the public sector consists of two parts; namely, internal control which is exer-cised by the executive functionaries to give account in the meetings of the legislatures (Cloete, 1998:265).

(a)   *Internal control*

Internal control is the responsibility of all political executive office-bearers in charge of executive institutions and the officials attached to public institutions. Control can be

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defined as the demarcation of work environments within which the functionaries individually and collectively have to pursue their collective goals subject to legislative and other valid directives (Cloete, 1998:266).

According to Miewald (1978:149-151) there are three ways in which control can be exercised.

Firstly, control can be exercised by the institutional situation created by –

❖ policy-making, which demarcates the field of work and sets the objectives;

❖ the organisational arrangements, which give form to the institutions responsible for the field of work and which also determine the relationships that each functionary bears to the others;

❖ the determination where necessary of recording the work procedures which the functionaries must follow;

❖ the financial arrangements, since the programme of work to be done is set out in detail when the legislatures are asked to approve the budgets of executive institutions each year;

❖ prescribing conduct rules for the political office-bearers and the officials employed in public institutions.

Secondly, control is exercised in the institutional situation by the use of formal control measures which ensure that everything that the functionaries do, is aimed at achieving the set objectives. Examples of such control measures are reports, inspections, audits, cost accounting, statistical returns, instructions setting out the minimum standard and volume of work expected of functionaries as they provide services or supply products to the community, as well as the programmes of work which have to be adhered to.

Thirdly, control is exercised in an informal manner by the influence functionaries exercise over each other. Of particular significance in this regard is the continuing super-

vision that supervisors exercise over their subordinates, the example they set for them and the leadership they give them. These supervisors may be at any level of the administrative hierarchy of a public institution.

In practice control of public schools is the responsibility of District Managers and Circuit Managers at provincial level. At school level, the control of the school is under the school governing body, which is assisted by the principal who could be known as the school manager. The institutional hierarchy for schools in implementing outcomes-based education policy is as follows: the Director responsible for outcomes-based education policy, school govening body, school manager, heads of departments and educators.

(i)   *Formal control measures*

There are five major formal control measures that must be exercised cautiously. The measures according to Cloete (1998:267-270) are the following:

❖   Firstly, written reports, which are the best known traditional control measures in the public sector. An advantage of the written report is that it provides tangible documentary evidence of whatever takes place. The mere fact that political office-bearers and officials must submit written reports on their activities will encourage them to do their work carefully and meticulously. It is also necessary to determine beforehand whether a report will indeed serve its intended purpose. Should it be found that a written report will satisfy requirements, then specific instructions should be issued on how to draw up the report and what information to give.

❖   Secondly, inspection and investigation *in loco* are also a well-known traditional control measures in the public sector. The advantage of an inspection or an *in loco* investigation is that it takes place in the actual work environment with the result that it can readily be established whether any action taken did in fact serve

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a useful purpose.

❖ Thirdly, auditing is one of the traditional control measures which undoubtedly will continue to be used. Usually auditing is done after transactions have taken place, which is its serious shortcoming as a control measure. Furthermore, auditing is usually concerned only with the legal correctness of transactions. Be that as it may, it is being realised that auditing should be done in such a way as to prevent any wrongful transactions from taking place.

❖ Fourthly, cost accounting, cost comparisons and cost analysis are useful aids to evaluate standard transactions objectively at the operational level. These aids are valuable because they help rationalise the compilation of the budget, and also assist in the compilation of work programmes which can form parts of the budget. Therefore, control is exercised before the programme of work is approved and implemented.

Cost comparisons can be of value for purposes of control where a number of organisational units provide the same services and supply the same goods, for example, post offices and municipal authorities. The costs can be expressed in monetary terms or based on working hours. Cost accounting, cost comparison and cost analysis are particularly relevant in achieving efficiency by using available resources sparingly or ensuring that stores and equipment are purchased economically.

❖ Fifthly, statistical returns when used together with cost accounting can serve as useful internal control measures because they can measure productivity. Figures reflecting costs can, together with other statistical returns, provide objective criteria for purposes of assessing results and for compiling work programmes involving the allocation of personnel and resources.

(ii)   *Informal control*

Internal control, like all other comprehensive processes of administration, has its informal side. The organisational system provides for a hierarchy of functionaries and groups of functionaries who supervise subordinates. The supervisors use formal control measures for controlling the actions of their subordinates (Henry, 2001:130).

Supervision and leadership can never consist only of the application of measures and techniques for exercising control. From labour's perspective the informal side of control may sometimes be more effective than the application of formal control measures. Therefore, for purposes of exercising control, emphasis should be placed on matters such as morale and *esprit de corps*.   Informal control will be strengthened by inculcating in public functionaries a sense of duty, a will to work, diligence, national pride, self-development and professional pride (Henry, 2001:130).

(b) *Accountability*

One of the cornerstones of public administration, which is indicative of the level of civilisation, is that each public functionary is accountable for what he/she does. That is, he/she can be called upon to answer for his/her deeds in public and be rewarded or rebuked whatever the case may be.

Accountability in public administration can be viewed from different perspectives, for example, how and why the executive institutions have to yield to the legislatures. The latter are responsible for ensuring that account is given for any act prejudicial to the interests of the community. By so doing the community is protected from irresponsible and corrupt officials. Although there are many aspects of accountability that are worthy of consideration, only the accountability of the legislatures will be discussed (Rosenbloom, 1986:332).

In public administration the supremacy of the legislatures is acknowledged and emphasised. This requires, amongst other things, that the legislatures should enforce accountability on the executive institutions and functionaries. In this regard reference can be made to the following (*Constitution of the Republic of South Africa*, 1996):

❖ Section 87 of the *Constitution of the Republic of South Africa*, 1996 (Act 108 of 1996), which provides for the impeachment and removal from office of the President, should he/she perform unsatisfactorily.

❖ Section 92 which provides that ministers and the Deputy President will be accountable individually and collectively to Parliament.

❖ Section 133 which provides that members of the Executive Council of every province will be accountable individually and collectively to the Premier and the provincial legislature.

From the above it is obvious that accountability can be enforced by the legislatures only if their members are prepared to make the best use of the available control measures. Be that as it may, the control functions of legislatures are inhibited mainly because it became necessary to delegate an increasing number of judicial and legislative powers to executive functionaries, boards, councils and commissions (Cloete, 1998:271-272).

(c)   *Control and accountability: Implications for policy implementation*

Governmental institutions have been entrusted by citizens with the responsibility to look after public resources, for example, land, minerals, fauna and flora, water, public transport. It is a well-known fact that resources are characterised by scarcity. Hence, the need to apply the principles and practices of economics in order to find ways and means of how to use these resources to satisfy countless needs of the citizens. Therefore, government, with its different organs, is obliged to look after the resources, to see to it that public services and goods are rendered to the citizens, and that the supply of the scarce resources is not depleted.

Apart from looking after the resources, government has a responsibility to see to it that

its public functionaries perform their tasks effectively and efficiently. Service delivery and production of public goods, in practice, is performed by public servants on behalf of government. That is, governmental institutions and functionaries delegate their responsibility of satisfying public needs to subordinate institutions and functionaries. Moreover, because of its myriad of responsibilities, government in the Republic of South Africa is one of the biggest employers, if not the biggest.

From the above is it clear that there is a dire need for governmental institutions to devise control measures to ensure that functionaries subordinate to them perform tasks assigned to them timeously, efficiently and cost-effectively. These measures are also helpful to hold functionaries accountable.

Tasks that are assigned to functionaries are nothing else but measures to give effect to public policies. Government formulates public policies and functionaries implement them. Control measures to enforce accountability are tools that government make use of to see to it that policy objectives are met. Therefore, control measures and account-ability are also helpful for successful implementation of outcomes-based education policy.

6.4.5   Organising

The state consists of a multitude of public institutions, also known as organisations. For the creation and the maintenance of each public institution a number of functions have to be performed.

In carrying out an extensive task that has to be performed by many people, there must be a clear indication of the roles and responsibilities of each participant. This is helpful in the sense that it makes provision for who should report to whom and who should be held responsible in case something goes wrong. This process is applicable to situations ranging from a departmental office where several administrative functions are carried

out to projects which involve several departments. Furthermore, the organisational structure and duties allocated should give employees a clear idea of their responsibilities and the authority they have. It is imperative to have this basic organising arrangements, otherwise government institutions are bound to fail to perform all tasks assigned to them diligently to achieve predetermined objectives (Van der Waldt & Du Toit, 1999:188).

The organisational structure of an institution should be arranged in such a manner that it becomes impossible to escape responsibility because nobody can be held responsible for specific actions. There will always be efforts of individuals to protect themselves against the risk of being held responsible for wrong decisions. Through organising and proper division of work, it is possible to make subordinates and supervisors accountable to their superiors (Coetzee, 1991:64). Müller (1996:30) concurs with the afore-mentioned viewpoint when he states that the role of the public managers is to control resources as well as reviewing, monitoring and auditing. This state of affairs is crucial as far as the exploitation and utilisation of resources is concerned.

Organising is comprehensive and involves much more than arranging individuals and groups in a specific order to achieve a simplistic objective. After individuals have been grouped in an organisational unit, attention will have to be given to their mutual relations as individuals within a unit, and also to their relations as a group towards other groups. This is bound to be a continuous process because individuals and groups are living entities whose attitudes and feelings change constantly. Experience has shown that the process of arranging mutual relations between individuals and groups is much more problematic than the mere physical arrangement of individuals into groups. Issues such as co-ordination and delegation rear their heads. Therefore, there are many aspects to organising, each of which has to be given careful thought and continual attention (Cloete, 1998:166).

It is worth noting that organisational arrangements that are successful in one com-

munity cannot be applied elsewhere without adapting them according to the needs of the new environment. It, therefore, follows that the organisational arrangements for education that are successful in one province might fail in other provinces.

(a) *Internal organisational arrangements*

After planning has taken place to allocate duties to a public institution, it is prudent to organise it internally. Internal organisation is important because numerous and varied functions are usually performed by an executive institution or even a sector thereof (Du Toit *et al.*, 1998:50). For example, in the National Department of Education there is a directorate responsible for the implementation of outcomes-based education policy. Within this directorate there are staff members responsible for the training of educators by means of conducting workshops to deal with outcomes-based education policy.

Every public institution is a hierarchy consisting of a number of officials headed by one or a small group of political office-bearers. At the top of the hierarchy there would be either one office-bearer or a body of office-bearers which could be a council, board or commission. The solitary office-bearer or body of office-bearers directs the work and accepts responsibility for everything that is done. The ranking in a hierarchy of political office-bearers and officials is the result of a vertical assignment of authority and horizontal division of work. Both the political office-bearers and officials will communicate and interact with each other continuously to ensure that they achieve predetermined objectives through co-ordinated action (Cloete, 1998:172).

According to Cloete (1998:172-173) an organisational unit results from a series of actions or processes known collectively as organising. The processes or functions constituting organising can be grouped into two groups, executed consecutively. The first group of functions in the public sector is concerned with determining objectives with policy-making and preparation and passing of legislation. The second group is concerned with:

❖   The horizontal division of work to obtain posts which are grouped together to form

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a hierarchy in subsections, sections, subdivisions, divisions, branches and eventually a department.

❖ The assignment of authority, which is also known as delegation of authority, to provide for division of work to determine the mutual relations between the functionaries as well as fix responsibility at each level.

❖ The co-ordination of the activities of the functionaries and the organisational units into which they are grouped, to ensure that they achieve the policy objective.

❖ Arrangement of channels of communication to ensure that all the functionaries are kept informed about the activities taking place and the progress made in achieving objectives. This viewpoint is echoed by Schwella (1996:28) when he states that institutions need sets of interconnected channels of communication for principles of receiving, processing and directing internal and external messages. This means that within the context of management of resources, it is crucial for the directorate of outcomes-based education policy to communicate with the provincial departments of education, the public at large as well as with non-governmental institutions and functionaries.

❖ The establishment of control measures to ensure that the functionaries at each level of the hierarchy concentrate on achieving the ultimate objective. Moreover, functionaries are held responsible for their work by those holding higher posts in the hierarchy and to whom the subordinates are accountable.

From the above it is clear that both skill and insight are needed to carry out each process or function of organising.

(b) *Human dimension of organisation: Organisational development*

Change is a common occurrence in institutions that managers have to deal with on daily basis. Change can come from inside an institution or it may arise outside an institution. To deal effectively with the continuous change of an institution, organisation development is helpful. Furthermore, it makes it possible for institutions to move away from a

current situation to a derived position in future (Van der Waldt & Du Toit, 1999:287).

Different authorities in the field of study of organisational development have defined it differently. Be that as it may, these definitions are both complementary and supple-mentary. For example, Pratt and Bennet (1989:363) define organisational development as a long-term effort to enhance the ability of an institution to improve its ability to solve problems and to cope with change. Mercer (1991:7) defines it as a planned and sequential effort which aims at changing an institution. Starling (1998:402) defines organisational development as the application of behavioural science knowledge in a long-term effort to improve an institution's ability to copy its environment as well as enhancing its capabilities to solve its internal problems.

An institution is a hierarchical structure of groups of individuals created for the attain-ment of specific objectives. Therefore, it is necessary that every organisational unit should be structured in such a way that the smallest number of employees will be enabled to work together to deliver the largest attainment of objectives. However, an organisational unit duly constructed along sound organisational principles, theories and practices may fail to achieve policy objectives. This may occur due to deficiencies in the performance of the employees appointed or promoted to staff the organisational unit. Inability to perform satisfactorily by the employees may be caused by a number of factors; for example, unsatisfactory supervision and leadership, appointment and promotion of employees without proper selection and merit-rating, patronage and nepotism, insufficient education and training to employees, inability to rationalise work methods and procedures, and failure to punish employees who are downright lazy (Cloete, 1998:185).

To eliminate the shortcomings that originate from the behaviour of the personnel employed in an organisational unit the behavioural science approach was developed to become known as organisational development. Organisational development, according to Cloete (1998:185) is based on the assumption that employees are usually able and

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willing to:

❖   Identify the reasons for unsatisfactory performance of the organisational unit in which they are employed.

❖   Find and suggest worthwhile solutions to improve the production level of the organisational units in which they are employed.

❖   Improve the productivity of the institution in which they are employed if their contributions are obtained to devise ways and means of improvement.

❖   Practice self-renewal and self-improvement in order to create a climate of pro-active performance in the workplace.

Organisational development is regarded as a systematic analysis of the institution. Moreover, it is concerned with the realisation that an institution must understand and have in place a management plan to deal with change. Furthermore, it is concerned with the development of strategic planning to cope with change. This strategy enables an organisation to increase its effectiveness through planned interventions. In addition, the strategy aims at changing the institution's values, beliefs and attitudes so that it can manage changes in technology, clients and challenges (Van der Waldt & Du Toit, 1999:288).

From the definitions of organisation development as well as its purposes, it can be deduced that it will set for itself goals to be achieved. The goals of organisation development, according to Pratt & Bennett (1989:364) are to

❖   improve interpersonal competence;

❖   bring about a change in values so that human factors are legitimised;

❖   avoid conflict by improving interpersonal relations;

❖   develop and encourage teamwork;

❖   develop better methods of conflict resolution; and

❖   develop organisations that grow and are responsive to change.

Organisational development is, in fact, a tool of personnel management. It could, therefore, be linked with sensitivity training aimed at changing the attitudes of individuals towards their colleagues and team-building.

(c) *Organising: Implications for policy implementation*

A public institution, like the Department of Education, could employ numerous employees in its various constituent parts to perform tasks in the process of providing public goods and services. The functionaries of the Department of Education are arranged in an administrative hierarchy of authority. This presupposes that supervisors must have an orderly, systematic and functional approach towards their work to attain predetermined public policy objectives.

The South African Department of Education and the provincial education departments are big organisational units which employ a variety of educators, school managers and district managers. For the subunits of the provincial departments of education to perform tasks assigned to them, it is imperative to apply internal organisational arrangements that are effective. Supervisors who are district managers, school managers and heads of departments must be equipped with the necessary skills to give satisfactory leadership to their subordinates. To this end, organisational development plays a crucial role, especially when the entire education system has to be re-engineered. Appropriate organising is essential for the implementation of outcomes-based education policy.

6.5 MONITORING AND EVALUATION

Monitoring and evaluation are significant constituents of a policy process. They have to generate information about causes and consequences of public policies as well as the determination of the value or worth of public policy outcomes. See Chapter 3, sections 3.5 and 3.8.1 *supra*. Their implications for policy implementation are explained hereafter.

6.5.1   Monitoring and evaluation: Implications for policy implementation

On the one hand, monitoring generates essential information about relationships among policies, their implementation and outcomes. Thus, it serves as an invaluable tool in policy management. Monitoring performs four major functions; namely, compliance, auditing, accounting and explanation. These functions should accompany the implementation of outcomes-based education policy.

Firstly, it is essential that all stakeholders involved in public policy implementation should comply with procedures imposed by the policy as dealt with in Chapter 3, section 3.9. For instance, for outcomes-based education the educator is expected to play a facilitator's role. Thus, compliance, which is a public policy monitoring function, promotes the successful implementation of outcomes-based education.

Secondly, it is essential that all resources earmarked for policy implementation are used appropriately and to the benefit of the target groups as dealt with in Chapter 3, section 3.9. Hence, the need for auditing to be performed to ensure that resources that have been set aside for the implementation of outcomes-based education policy reach the school and are used to the benefit of the school managers, educators and learners.

Thirdly, it is essential to have information that can be used to account for social and economic changes brought about by the implementation of outcomes-based education

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– see section 3.9 of Chapter 3. Outcomes-based education aims at producing learners who are critical and independent thinkers, respecting and promoting democratic principles. Furthermore, outcomes-based education prepares learners to participate in the economic affairs of the global village.

Fourthly, it is essential to have information that helps to explain why the outcome of public policies and programmes differ. For example, comparison between outcomes-based education and the traditional approach indicates that the former encouraged learners to look for information and be engaged in research, while the latter en-couraged learners to be passive recipients of information and to resort to memorisation.

Evaluation is one of the essential stages of the policy process because it determines the usefulness or otherwise of the policy, and the impact made by the policy outcomes. It has three main distinguishing features, which are value focus, fact-value interdepen-dence and present and past orientation.

Firstly, evaluation focuses on the values or worth of public policies. For instance, it is essential to know the value of outcomes-based education, which, *inter alia*, affords educators an opportunity for more precise planning of their work. As far as learners are concerned, the major benefit of outcomes-based education is that those who failed to achieve predetermined objectives are given further opportunities to succeed.

Secondly, it is essential that evaluation should focus on facts as well as value judge-ments of public policy. For instance, according to outcomes-based education, one of the advantages enjoyed by learners is that they are provided with knowledge, skills, and values that prepare them for the world of work.

Thirdly, and lastly, evaluation is retrospective in nature as it happens after action dic-tated by the public policy has taken place. The same applies to the outcomes-based education policy. For instance, outcomes-based education was adopted as an

education policy directive in South Africa to improve the quality of teaching and learning. Although the decision to employ this education policy was taken in the present, its evaluation results could be known in the future after the policy had been applied. That is, whether the policy achieved its predetermined objectives, or not, could be determined in the future after evaluating the policy.

6.6 POLICY IMPLEMENTATION MODEL: OUTCOMES-BASED EDUCATION

Public administrators, as implementation forces, embody and symbolise what is both effective and defective about how policies are formulated and implemented. It is crucial to examine the forces and circumstances that are commonly cited to explain the stages of public policy formulation. This is a complex process as there are many variables which are inextricably involved in the public policy environment. One way of simplifying the complex process of explaining how public policies are formulated and implemented is the application of models.

According to Morrow (1975:89), a model is an abstraction of reality. Although it does not exist in the real world, it represents a tentative and partial explanation of behaviour. It makes it possible for policy analysis to occur by comparing the real world of public policy formulation with the abstraction of the model. Dye (1995:18) concurs with Morrow (1975:89) when he states that a model is a simplified representation of some aspect of the real world. The aim is to arrive at some tentative conclusion as to what extent the forces encompassed by the model explain the real causes for public policy development. The degree of variation which indicates the extent to which the public policy formulation process confirms or rejects the model reveals the basis of public policy making. However, it should be stressed that no model is an exact reflection of reality. To overcome this shortcoming, several models should be examined simultaneously. This enables the analysts to appreciate the extent to which each constellation of forces embodied by the model is responsible for the development and implementation of public policy.

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The need for models have been caused by social scientists who became more involved in comparing and explaining a phenomenon. Models enable analysts and researchers to have some basis for differentiating what is important. Although there are many competing models, it has been established that philosophically there are four models; namely, formism, mechanism, contextualism and organicism (Schuman, 1976:199).

Models used in studying public policy are conceptual models. According to Dye (1995:18) models for policy analysis are developed to –

❖   simplify and clarify concepts about public policy;

❖   identify essential aspects of public policy problems and issues;

❖   facilitate communication by focusing on essential features of public policy and other political matters;

❖   help to concentrate on important issues and to promote better understanding; and

❖   provide possible explanations of public policy and predict outcomes.

Models have been devised to carry out policy analysis and to enhance the quality of policy analysis. Policy analysis can be done at all stages of public policy evaluation, including policy implementation. These models can be divided into two categories; namely, descriptive models and prescriptive models (Thornhill & Hanekom, 1995:58). Descriptive models include:

❖   The functional process model, which explains who is involved in policy formulation and how the process unfolds.

❖   The group model, which focuses on the analysis of the influence of interest groups on policy makers.

❖   The elite or mass models, which explain the roles played by the elite, the masses and the executive institutions.

❖   The systems model, which portrays the interaction between inputs, conversion, outputs and feedback.

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❖ The institutional model, which gives a pictorial representation that explains the relationship between the institutions concerned with policy making and policy implementation.

Thornhill and Hanekom (1995:58) explain prescriptive models as follows:

❖ The rational comprehensive model, which emphasises that all relevant information about a particular matter be taken into consideration.

❖ The incremental model, which indicates that under normal conditions public policies are usually changed to remain realistic.

❖ The mixed scanning model, which combines the features of both comprehensive and incremental models.

Another type of model is called the integrationalist model. This model depicts an organisational structure in which authority and responsibility are centred in an elected office-bearer who is assisted by aides. Units within the institution are divided according to purpose and are arranged in a hierarchy. Within each unit staff exercise control and has specific assignments of authority to assist the elected office-bearer (Pfiffner & Presthus, 1967:177).

Models are used for various purposes, for instance for policy optimisation especially in choosing among alternative policies in order to minimise unnecessary delay. In this regard time-oriented optimisation models are utilised. According to Nagel (in Eddy, 1983:383-384), these models make use of methods such as:

❖ queueing theory to predict or determine the delay and backlog caused by changes in a system.

❖ optimum sequencing to reduce time for waiting.

❖ critical path theory to establish where efforts should be made to reduce delay.

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