## **CHAPTER FIVE**

# EMPIRICAL INVESTIGATION ON THE NEED FOR COMMUNITY

## **COLLEGES IN THE EASTERN FREE STATE**

#### 5.1 Introduction

•

The literature review conducted in Chapter Four concerning the provision of vocational education for adults in South Africa has, among others, revealed that:

- Many South Africans lack the education and skills that are necessary for them to earn a living or to engage in personal development through education. One of the factors to which this state of affairs is attributed is the lack of or inadequate educational opportunities available to the vast majority of South Africans in the past.
- Community colleges, based on the American model, have been advanced as one of the possible solutions to the abovementioned problem.
- Advocates of the establishment of community colleges in South Africa have suggested models of a South African community college with features that take into account the South African situation.

In this chapter therefore the empirical investigation of the need for community colleges in the Eastern Free State is postulated. The main purpose of the empirical investigation is to find out from residents of the region whether in their opinion there is a need for the establishment of

community colleges in their area and whether they would support the type of community college suggested by advocates of community colleges in South Africa.

Best and Kahn (1993: 109) assert that this type of investigation involves a clearly defined problem and definite objectives; requires expert planning; careful analysis and interpretation of the data gathered as well as logical and skilful reporting. Thus, the elucidation of the processes referred to by these authors, insofar as they pertain to this investigation, is the subject of this chapter. The chapter will therefore concern itself with the objectives of the empirical investigation, procedures to be followed in carrying out the investigation as well as the presentation and analysis of the data gathered.

#### 5.2 Objectives of the Investigation

Based on the above-mentioned findings of the literature reviewed in Chapter Four, there are four objectives for this empirical investigation. They are:

- To analyse the reaction of the respondents on the availability and adequacy of education opportunities to adults and out-of-school youth of the Eastern Free State.
- To evaluate the opinion of the respondents as to the need for the establishment of community colleges in the Eastern Free State.

- To investigate the impression of the respondents on the services to be rendered by community colleges should they be established in the Eastern Free State.
- To determine the perceptions of the respondents on the type of community college that would best suit the needs of the residents of the Eastern Free State in terms of admission requirements, articulation agreements with other types of educational institutions, accreditation, governance, scheduling and the location of delivery sites.

It is hoped that these objectives will be achieved by following the set of procedures detailed in the following section.

#### 5.3 Procedures

This section will elucidate the procedures that were followed in the conduction of the empirical investigation. It will include the research design, sampling procedures, the research instrument, internal validity, the pilot study, administration of the questionnaire and data analysis.

## 5.3.1 Research Design

Research design refers to the plan and structure of the investigation to obtain data to answer research questions. It describes the procedures for conducting the study including the time, subjects, as well as the conditions under which the data will be collected. Thus, research design indicates how the research is set up describing what happens to the subjects, the methods that will be used for collecting data and the data

analysis techniques that the researcher intends to use (McMillan and Schumacher, 1993:31; see also, Fraenkel and Wallen, 1993: 556).

The research design used in this investigation is a survey design involving descriptive research. This includes the use of questionnaires, which are administered to a carefully selected sample to determine their perceptions on the need for the establishment of community colleges in the Eastern Free State.

Fraenkel and Wallen (1993: 345; see also, Sharp and Howard, 1996: 12; Best and Kahn, 1993:107), identify three major characteristics of surveys, which are also essential components of this survey. They are:

- Information is collected from a group of people in order to describe some aspect or characteristic, such as opinions and attitudes of the population of which that group is a part.
- The main way of collecting the information is through asking questions. The group members' responses to these questions constitute the data of the study.
- Information is collected from a methodically selected sample rather than from the entire population and a description of the population is inferred from what is found out from the sample.

In the light of the above, it would now be appropriate to turn our attention to the sample and the sampling procedures used in this investigation. As mentioned above the conclusions drawn from the

investigation will be based on the findings based on the data collected from this group.

#### 5.3.2 The Sample

Individuals who participate in a study and from whom data are collected are referred to as subjects. As a group, subjects are referred to as the sample. The sample is composed of individuals selected from a larger group called the population. In studies where the sample is used as a unit of study, conclusions are drawn about the entire population based on the results obtained from the data collected from the sample. Researchers would prefer to study the whole population but in most cases, like in this investigation for instance, this is not possible since most populations are large, multifarious and scattered over a large geographical area. Finding and contacting all members of such populations can be time-consuming and expensive. For this reason, it is always best to select a sample to study (McMillan and Schumacher, 1993:159).

Fraenkel and Wallen (1993: 80) contend that the first task in selecting a sample is to define the population of interest, i.e., the group to whom the results of the study will be generalised. Insofar as this study is concerned, the population comprises seven groups of people in the Eastern Free State, who, in the opinion of the researcher, would be interested in or would be affected by the establishment of community colleges in the region. These groups are:

- Secondary school educators from the 96 secondary schools scattered throughout the 19 towns constituting the Eastern Free State. These are the last group of educators to deal with students before they qualify to enter community colleges. They would be interested in the establishment of community colleges because this would increase their students' options after leaving secondary schools.
- Officials from the *Thabo Mofutsanyana Education District*. These include School Management Developers (SMDs, formerly known as school inspectors) and Learning Facilitators (LFs, formerly known as subject advisors). Like secondary school educators, they too would be interested in the additional students' options that would be brought about by the establishment of community colleges.
- Members of *School Governing Bodies* of the 96 schools mentioned above. As representatives of parents of prospective community college students, they too would be interested in the establishment of community colleges in their area.

٠

- Lecturers from the six delivery sites of the *Maluti FET College*. Characteristics of FET students are similar to those of prospective community college students. This group will consequently have an interest in the establishment of community colleges in their area of operation.
- Lecturers from the Qwaqwa Campus of the University of the Free State. This is the only university in the Eastern Free State. Since

one of the proposed functions of a community college is to prepare students for entry into universities, these institutions will definitely be affected by the introduction of community colleges in the education system.

- The Qwaqwa Campus of *Technikon Free State*. Again, this is the only technikon in the Eastern Free State. Some programmes of technikons are similar to the proposed programmes of community colleges. The technikon will therefore also be affected by the establishment of community colleges in the Eastern Free State.
- Representatives of *Business and Industry*. One of the proposed functions of community colleges is the training and re-training of the workforce for these sectors. The establishment of community colleges in their area will therefore also affect them.

Literature has no clear-cut answer to the question concerning sample size, i.e., the number of subjects in a sample. Best and Kahn (1993: 19; see also, Fraenkel and Wallen, 1993: 92) assert that the ideal sample should be large enough to serve as an adequate representation of the population about which the researcher wishes to generalise and small enough to be selected economically in terms of subject availability, expenses relating to time and money as well as the complexity of data analysis. Sharp and Howard (1996: 134) believe that sample size is proportional to the square of the accuracy of the estimates derived from the sample. According to them, to double the accuracy it is necessary to increase the sample size four-fold. McMillan and Schumacher (1993:

165) are of the opinion that in instances where random sampling is used, a sample size that is only a small percentage of the population can approximate the characteristics of the population satisfactorily. They also argue that the determination of the sample size should also take into consideration factors such as the type of research being conducted, financial constraints, size of the population, importance of the findings and so on.

Based on their contentions advanced above, Fraenkel and Wallen (1993: 92) and McMillan and Schumacher (1993: 165) agree that for a survey research such as this one, a sample with a minimum number of approximately100 subjects is sufficient, while Best and Kahn (1993: 19) are content with a sample of 30 subjects coupled with random sampling. It is further recommended that for survey research studies in which groups in the sample are compared, there should be at least 20-50 subjects in each sub-group (McMillan and Schumacher, 1993: 165) Taking all the above arguments into consideration, the sample size for this study is composed of a total of 390 subjects. These were selected for each sub-group, mostly by random sampling as described in the following sections. Each of the sub-groups of the sample with the exception of the technikon sub-group has no less than twenty subjects.

#### 5.3.2.1 Selection of Schools

The 96 secondary schools in the Eastern Free State can be classified into three categories as follows:

- Black schools situated in rural areas. They constitute 40% of the total secondary schools in the area and are attended by Black students only.
- Black schools situated in urban areas. They constitute 47% of the total and are also attended by Black students only.
- Former White schools that constitute 13% of the total and are attended by students of different racial groups.

Twenty schools (approximately 20% of the total) were selected for inclusion in the sample. In order to ensure proportional representation of the three categories of schools in the sample, a combination of systematic and stratified random sampling was used. This resulted in a school sample of eight Black schools situated in rural areas (40% of the sample), nine Black schools situated in urban areas (47% of the sample) and three former White schools (13% of the sample).

#### 5.3.2.2 Selection of School Educators

From each of the schools selected above, 10 educators were selected by stratified random sampling. This was done in order to ensure, where applicable, a balance in terms of gender and race. Thus, the school educator sample was comprised of 200 subjects.

#### 5.3.2.3 Selection of Parent Representatives

Two parent members of the School Governing Body (secretary and chairperson) of each of the twenty selected schools constituted the

parent representatives in the sample. There were therefore a total of 40 subjects in this category.

## 5.3.2.4 Selection of Department of Education Officials

There is a total number of 76 DoE officials in the Thabo Mofutsanyana Education District. These include School Management Developers and Learning Facilitators. Forty representatives of these officials were selected for inclusion in the sample. The use of stratified random sampling ensured a gender and racial balance.

#### 5.3.2.5 Selection of University Lecturers

The Qwaqwa Campus of the University of the Free State (formerly campus of the University of the North) is the only university in the Eastern Free State. From 1998 to 2002, the university had a Centre called the Centre for Community Colleges (CCC). The CCC was rendering services to the community, which are similar to those being rendered by American community colleges. Members of the CCC governing board who were still attached to the university as well as other lecturers who were associated with the activities of the centre were included in the sample because of their familiarity with the functioning of community colleges. Thus, purposive sampling was used in this case resulting in a sample of 25 lecturers.

#### 5.3.2.6 Selection of Technikon Lecturers

There are ten lecturers at the Qwaqwa campus of Technikon Free State. This is the only technikon in the Eastern Free State. All these lecturers were included in the sample.

#### 5.3.2.7 Selection of FET Lecturers

There are more than 200 educators in the 6 delivery sites of the Maluti FET College situated in the Eastern Free State. Ten lecturers from each of the six delivery sites of the Maluti FET College were selected by stratified random sampling to ensure a gender and racial balance.

#### 5.3.2.8 Selection of Business Representatives

This sector was represented by 15 subjects. These were members of the executive committee of a chamber of commerce in the Eastern Free State. They are residing in different towns in the region.

In the opinion of the researcher, the sample of 390 subjects described above, is a good representation of the population of interest. We will now pay attention to the instrument used to collect data from this sample.

## 5.3.3 The Research Instrument

The research instrument used for the collection of data for this study will be described in this section. This will include the type of instrument

used as well as justification for its choice, items constituting the instrument and instrument validity.

#### 5.3.3.1 Type of Research Instrument used

This empirical study was conducted with the purpose of determining the attitudes of the residents of the Eastern Free State on the establishment of community colleges in the region. In order to accomplish this, information had to be collected from the sample in order to describe the opinions and, hence, the attitudes of the population of interest on the establishment of community colleges in the Eastern Free State. Best and Kahn (1993: 245) make a distinction between opinion and attitude. They describe attitude as how people feel and what they believe and opinion as what people say are their beliefs and feelings. They further point out that it is difficult if not impossible to describe and measure attitude and that through asking questions or getting expressed reactions of people to statements, a sample of their opinions is obtained from which one may infer or estimate their attitude, i.e., what they really believe. Similarly Fraenkel and Wallen (1993: 113) are of the opinion that researchers may discover attitudes by asking individuals to respond to a series of statements of preference. The pattern of responses is then considered as an indication of one or more underlying attitudes.

Taking the purpose of the study as well as the views of the abovementioned authors into consideration, a Likert-scale type of questionnaire as illustrated in Appendix 13 was chosen for use in the

collection of information from the sample. Since subjects constituting the sample for the study are scattered throughout several towns in the Eastern Free State, the use of mailed questionnaires was found to be the most appropriate method of gathering data. As Fraenkel and Wallen (1993: 113) point out, the use of this type of instrument has an advantage over the use of other methods of data collection such as interviews in that they can be mailed or given to a large number of people at the same time.

Questionnaires do, however, also have some disadvantages, which include among others, that unclear or ambiguous questions cannot be clarified; respondents have no chance of expanding on or reacting verbally to questions of particular interest or importance and that response rates are often too low and raise questions of bias (Sharp and Howard, 1996: 146; see also, Fraenkel and Wallen, 1993: 113). Hence, certain precautions had to be taken during the construction and administration of the instrument to minimise the effects of the above-mentioned factors. These included the construction of a short as possible a questionnaire that does not require too much of the respondents' time, conduction of a pilot study to improve or eliminate unclear or ambiguous items and follow-up calls to respondents in order to increase the response rate.

#### 5.3.3.2 Questionnaire Items

The items comprising the questionnaire were divided into two sections, namely, section 1 and section 2. Items in section 1 related to the biographical information of the respondents. These included the respondents' town of residence, gender, age and highest qualifications as well as the educational institution from which they obtained their highest qualification and the sectors they represented. This information was required for the purpose of a thorough description of the sample.

Items in section 2 were intended to provide answers to four questions relating to the objectives of the study. Items 2.1-2.10 related to question 1, items 2.11-2.20 to question 2, items 2.21-2.30 to question 3 and items 2.31-2.40 to question 4. The four questions are:

#### Question 1

Are there sufficient educational opportunities available to adults and outof-school youth in the Eastern Free State?

#### Question 2

Would residents of the Eastern Free State be in favour of the establishment of community colleges in their region?

#### **Question 3**

What services are community colleges to render should they be established in the Eastern Free State?

#### Question 4

What type of community college would best suit the needs of residents of the Eastern Free State in terms of admission requirements,

articulation agreements with other types of educational institutions, accreditation, governance, scheduling and the location of delivery sites?

The items used in section two were derived from the following sources:

- A description of American community colleges found in various sources guoted in Chapters Two and Three of this document.
- A synopsis by Strydom (1995:53) of various models of a South African community college as envisaged by a variety of individuals and organisations.
- A questionnaire used by Singh (1996: 661) who conducted a similar study in KwaZulu-Natal. Some of the items in this questionnaire were found to be relevant to this study.

#### 5.3.3.3 Validity

Validity has to do with the defensibility of the inferences researchers make from the data collected through the use of an instrument. The inferences have to be appropriate, meaningful and useful. An inference is appropriate if it is relevant, i.e., if it relates to the purpose of the study; meaningful if it sheds light on the meaning of the information obtained through the use of the instrument and useful if it enables researchers to make decisions related to what they were trying to find out (Fraenkel and Wallen, 1993: 139).

The type of evidence relevant to this investigation, which may be collected to support the validity of the inferences made is content-related

evidence. Firstly, it is centred on determining whether the content that the instrument contains is an ample sample of the area of content it is supposed to represent. In other words, it ascertains whether the items included in the instrument sample a significant aspect of the purpose of the investigation. It relates to asking the right questions phrased in the least ambiguous way. Secondly, it has to do with the format of the instrument including aspects such as the clarity of printing, size of type, adequacy of workspace, appropriateness of language and clarity of directions (Fraenkel and Wallen, 1993: 142; see also, Best and Kahn, 1993: 242-243).

As recommended by Best and Kahn (1993: 242-243; see also, Fraenkel and Wallen 1993: 142) the following procedures were followed in ensuring content-related validity for this instrument:

The objectives of the study, a description of the sample and a copy of the questionnaire were given to two experienced researchers familiar with the field of investigation. The researchers were requested to compare the items with the objectives for the purpose of identifying items they felt did not measure one or more of the objectives of the study and to identify objectives that were not measured by any of the items. They were also requested to evaluate the format of the questionnaire. Necessary changes were made based on the recommendations of the researchers.

- The meanings of all terms used in the questionnaire were clearly defined to ascertain that they have the same meaning to all respondents (See Appendix 14).
- Respondents who are not proficient in the English language were assisted in the completion of the questionnaire.

These measures together with the pilot study described below enhanced the validity of the instrument used.

## 5.3.4 The Pilot Study

Fraenkel and Wallen (1993: 554) describe a pilot study as a small-scale study administered before carrying out an actual study. It is undertaken for the purpose of revealing defects in the research plan. A pilot study is usually followed by amendments in the instrument and the procedures of a study. Insofar as this study is concerned, a pilot study was conducted using respondents selected from the Qwaqwa area, which was most convenient to the researcher because of its proximity to his area of residence. The questionnaire was administered to two representatives of each of the sectors described in the biographical details of the respondents. As a result of the pilot study, the following amendments were made to the questionnaire:

- The number of items in the questionnaire was reduced from sixty to forty.
- It was realised that most of the respondents were not very familiar with the community college concept, as a result, a more detailed explanation of the concept was provided in sections 1 to 5 of the

covering letter accompanying the questionnaire to the respondents (See Appendix 17).

- Some double-barrelled items were split into two separate items.
   Items 2.2 and 2.4 as well as items 2.31 and 2.32 are a result of such a split.
- Question 2.20, which was originally stated in the form of a question was changed into a statement and resembled the rest of the items in the questionnaire.

#### 5.3.5 Administration of the Questionnaire

The distribution of the questionnaire to the selected sample described above commenced on the 22<sup>nd</sup> November 2002. Permission for the distribution of the questionnaire in schools, the Maluti FET College and the Thabo Mofutsanyana Education District was obtained from the Free State Department of Education (See Appendix 15). Following a directive from the Free State Department of Education, questionnaires sent to schools/colleges were accompanied by letters to the principals explaining the objectives of the research and requesting for permission to conduct the research in the schools (See Appendix 16). In addition to this letter, all the questionnaires were accompanied by a covering letter addressed to the respondent explaining the objectives of the research, requesting the respondent to participate in the research and giving the respondent a brief background of the community college concept (See Appendix 17). Finally, each respondent was supplied with a page containing a glossary of terms used in the questionnaire (See Appendix 14).

Two methods of distribution were used. Firstly, the researcher personally delivered the questionnaires to previously identified key persons in the sectors concerned. The sampling procedures were explained to the key person who was then requested to distribute the questionnaires to the selected subjects and to collect them after they had been completed. Secondly, the questionnaires were posted to the head of the sector concerned such as the school principal, who was requested to distribute the questionnaires to the subjects and to collect and post them back to the researcher in a self-addressed and stamped envelope. A register of the distributed questionnaires was kept for the purpose of controlling their return. A reminder was sent to key persons who delayed in returning the questionnaires. Table 5.1 below, indicates the number of questionnaires sent to each sector as well as the number and percentage of the questionnaires returned:

SECTOR	NUMBER	NUMBER	PERCENTAGE		
	FORWARDED	RETURNED	RETURNED		
COMMERCE /	15	10	66,7		
INDUSTRY					
EDUCATION	40	31	77,5		
DEPARTMENT					
FET	60	51	85		
INSTITUTION					
PARENT	40	28	70		
BODY					
SCHOOL	200	137	68,5		
EDUCATOR					
TECHNIKON	10	4	40		
UNIVERSITY	25	19	76		
OTHER		3			
TOTAL	390	283	72,6		

It can be seen from Table 5.1 that for some reason 106 of the prospective respondents did not return the questionnaire and that a response rate of 72,6% was obtained. Literature does not have a clearcut answer to the question relating to an adequate response rate. Best and Kahn (1993: 242) are of the opinion that a response rate of 50% is adequate, that of 60% is good and that of 70% is very good. It would therefore be safe to argue that the response rate for this study is high enough to validate the study. The questionnaires were then processed as described in the following section.

#### 5.4 Presentation and Analysis of Data

The returned questionnaires were inspected and were all found to be suitable and ready for analysis. They were sent to a research consultant at the University of Pretoria for processing. The data was coded, processed by computer and analysed using the software package for data analysis known as Statistical Analysis System (SAS).

## 5.4.1 Personal Information

The biographical information of the respondents supplied in section A of the questionnaire was analysed and is presented in Figures 5.1 to 5.5 and in Table 5.2. This includes their gender, race, age groups, highest qualifications, type of institution from which they obtained their highest qualifications and sectors they represent. Table 5.2 represents the distribution of respondents according to their towns of residence.

## 5.4.1.1 Gender and Race of the Respondents

The gender and race of the respondents are portrayed in Figure 5.1 below:

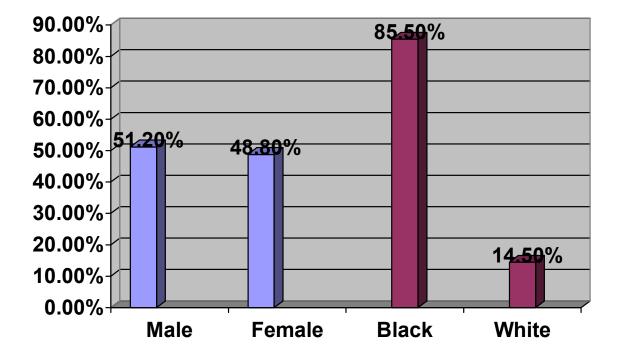


Figure 5.1: Gender and Race of the Respondents

It was important to this study to obtain the views on community colleges of both males and females. Figure 5.1 shows that approximately an equal number of males and females participated in the study. This suggests that both sexes are equally represented in the population.

The figure also shows that a substantially high number of the participants in this study were Blacks at 85,51% compared to 14,49% of Whites. These figures were obtained as a result of the principle of proportional representation that was used during sampling. Furthermore, these figures are slightly different from those cited in Figure 4.2, according to which Blacks and Whites respectively make up 76% and 12,8% of the population of the RSA. The two

population groups are therefore represented in the sample in more or less the

same way they are in the population generally.

## **5.4.1.2 Towns of Residence of the Respondents**

The towns in which the respondents live are indicated in Table 5.2 below:

TOWN	NUMBER	PERCENTAGE OF THE TOTAL
ARLINGTON	09	3,18
BETHLEHEM	34	12,01
FICKSBURG	15	5,3
HARRISMITH	30	10,6
KESTELL	09	3.,8
MEMEL	0	0
PAUL ROUX	06	2,12
PETRUS STYN	11	3,89
QWAQWA	136	48,06
SENEKAL	20	7,07
VREDE	8	2,83
OTHER	5	1,77

## Table 5.2: Residential Towns of the Respondents

The Table shows that the respondents reside in more than 11 towns in the Free State. The towns of residence referred to as "other", include towns supplied by the respondents that are different from those to which the questionnaires were forwarded.

Further scrutiny of Table 5.2 reveals that the majority of the respondents reside in the Qwaqwa area. This is to be expected taking into consideration that 40% of the schools to which questionnaires were forwarded, five of the six delivery sites of the Maluti FET College, the Thabo Mofutsanyana Education District Office, the Qwaqwa Campus of the University of the Free State and the Qwaqwa Campus of Technikon Free State are all situated in Qwaqwa.

Table 5.2 also shows that all the towns selected in the sample, with the exception of Memel are represented among the returned questionnaires. Despite several reminders, the questionnaires sent to Memel were not returned.

#### 5.4.1.3 The Age Groups of the Respondents

Figure 5.2 below indicates the age groups of the respondents. It can be seen from the figure that their ages range from 19 to more than forty years. It was earlier found that the ages of the majority of American community college students range from 18 to above forty (AACC, 2002(c): 1). Thus, the ages of the respondents do not differ much from those of potential community college students. It may therefore be assumed that in terms of age, the respondents are representatives of community college students and that their opinions on the establishment of community colleges will not differ much from those of potential community colleges will not differ much from those of potential community colleges will not differ much from those of potential community colleges will not differ much from those of potential community colleges will not differ much from those of potential community colleges students.

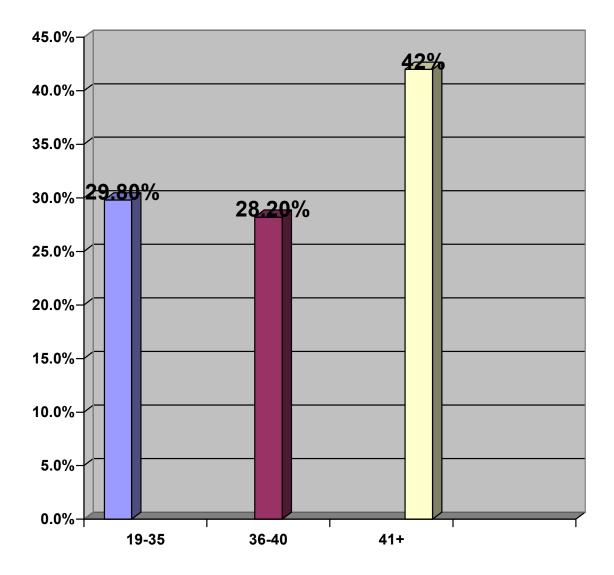


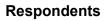
Figure 5.2: Age Groups of the Respondents

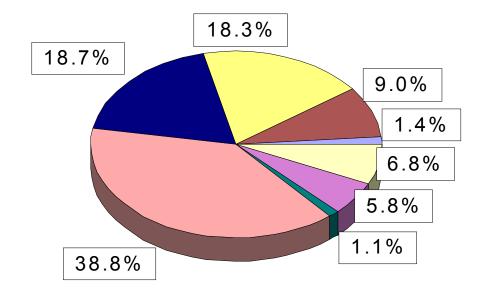
#### 5.4.1.4 Highest Qualification of the Respondents

An analysis of Figure 5.3 below shows that the majority of the respondents have a diploma as their highest qualification. Since according to the information depicted in Figure 5.5, most of the respondents are school educators it can be assumed that the majority of school educators in the Eastern Free State have a teachers' diploma as their highest qualification.

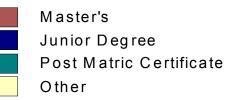
The envisaged community college in the region may perhaps have a role to play in assisting school educators to acquire higher qualifications.

## Figure 5.3: Highest Qualifications of the





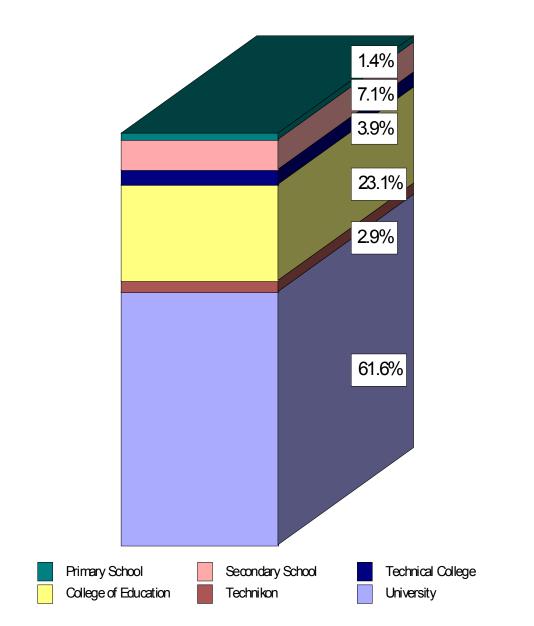




5.4.1.5 Type of institution where Respondents Obtained their Highest

Qualification

## Figure 5.4: Type of Institution where Respondents Obtained their



**Highest Qualification** 

The above block chart indicates that the respondents obtained their highest qualifications at different types of educational institutions. This fact will hopefully enrich their views since their responses will be based on a comparison of the educational institution they have already experienced and the new envisaged type of institution.

## 5.4.1.6 Sectors Represented by the Respondents.

Figure 5.5: Sectors Represented by the Respondents

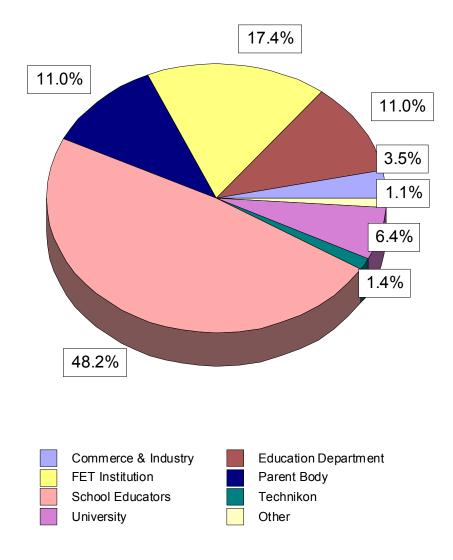


Figure 5.5 above shows that the respondents to the questionnaire represented different sectors of the residents of the Eastern Free State. This was done with the purpose of obtaining the views of as many different people as possible in terms of their occupations. It will be recalled that it was pointed out earlier that one of the contributing factors towards the success of the American community college is that it came into existence as a result of calls from different sectors of the population (Monroe, 1972:13; see also Tillery and Deegan, 1985: 3-5 and Cohen and Brawer, 1982:5). Thus, a South African community college whose establishment is based on the views of various sectors of the community will appeal to different students since it will be able to respond to multifarious students' needs.

#### 5.4.2 The Views of Respondents on Vocational Education and

#### **Community Colleges**

Items in section 2 of the questionnaire were intended to elicit the views of respondents on the availability and adequacy of education opportunities as well as on the establishment of community colleges in the Eastern Free State. The items were arranged into four groups with each group relating to one of the four research questions. The frequencies of the responses to each item as well as their percentages were calculated. The same procedure was repeated for the combined ten items relating to each of the four research questions. The results of the procedures described above are presented in the next sections.

## 5.4.2.1 Views of Respondents on Research Question 1

Items 2.1 to 2.10 of the questionnaire were intended to elicit the views of the respondents on research question 1, namely,

## "Are there sufficient educational opportunities available to adults and out-of-school youth in the Eastern Free State?"

The total number of responses, the frequencies of the responses and their percentages are indicated in Table 5.3 below:

## Table 5.3: Responses to Items 2.1 to 2.10 of the Questionnaire

Kev: S.D. = Strongly Disagree.	D = Disagree, U= Uncertain.	A= Agree S.A. = Strongly Agree

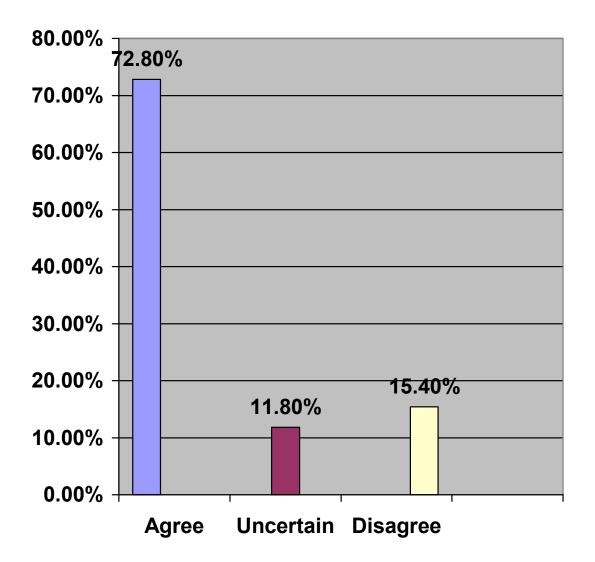
Statement		S.D.	D	U	Α	S.A.	Total
2.1 There are insufficient opportunities for adults to gain Higher Education in the Eastern Free State.	Frequencies	19	35	25	91	113	283
	Percentage	6,7	12,4	8,8	32,2	39,9	
2.2 There are presently	Frequencies	14	24	17	105	121	281
inadequate education opportunities for out - of - school youth in the Eastern Free State.	Percentage	5,0	8,5	6,0	37,4	43,1	
2.3 The geographical location of universities and technikons prevents most individuals in the Eastern Free State from improving their education qualifications.	Frequencies	14	44	35	88	99	280
	Percentage	5	15,71	12,5	31,43	35,36	
2.4 There are inadequate opportunities in the Eastern Free State for working adults to improve their work - related skills.	Frequencies	6	30	18	115	113	282
	Percentage	2,13	10,64	6,38	40,78	40,07	

Statement		S.D.	D	U	A	S.A.	Total
2.5 Fees at universities and technikons are not affordable to the majority of prospective students in the Eastern Free State.	Frequencies	3	5	20	76	178	282
	Percentage	1,06	1,77	7,09	26,95	63,12	
2.6 There are no training	Frequencies	8	17	24	89	145	283
opportunities for unemployed persons in the Eastern Free State.	Percentage	2,83	6,01	8,48	31,45	51,24	
2.7 Education institutions in the Eastern Free State do not cater for the citizens' personal interest needs such as cultural and recreational needs.	Frequencies	10	26	69	96	81	282
	Percentage	3,55	9,22	24,47	34,04	28,72	
2.8 The admission policies of universities and technikons prevent large numbers of prospective students in the Eastern Free State from proceeding to Higher Education.	Frequencies	14	44	36	96	92	282
	Percentage	4,96	15,6	12,77	34,04	32,62	

Statement		S.D.	D	U	A	S.A.	Total
2.9 Universities and technikons	Frequencies	15	39	35	94	100	283
in South Africa do not cater for the needs of educationally disadvantaged students.	Percentage	5,3	13,78	12,37	33,22	35,34	
2.10 Present university and technikon programmes in South Africa do not cater for the needs of communities in the Eastern Free State.	Frequencies	12	56	53	97	65	283
	Percentage	4,24	19,79	18,73	34,27	22,97	
Totals for Items 2.1- 2.10	Frequencies	115	320	332	947	1107	2821
		4,08	11,34	11,77	33,57	39,24	
	Percentage						

## Figure 5.6: Summary of the Responses to Items 2.1-2.10 of the Research

Questionnaire



Responses to these items as depicted in Table 5.3 and summarised in Figure 5.6 suggest that the respondents are of the opinion that there are insufficient education opportunities available to adults and out-of-school youth in the Eastern Free State. As manifested in Table 5.3 as well as in Figure 5.6, 2 054 of the responses, i.e., 72,81% indicate agreement with the statement that there are insufficient opportunities available to adults and out-of-school youth in the there are insufficient opportunities available to adults and out-of-school youth in the there are insufficient opportunities available to adults and out-of-school youth in the Eastern Free State. Only 435, i.e., 15,42% of the responses indicate disagreement with the statement, while 332 (11,77%) indicate uncertainty.

The responses show that of the three suggested possible obstacles to Higher Education, namely, the geographical location of universities and technikons (item 2.3), fees (item 2.5) and admission policies of institutions of higher learning (item 2.8), fees have been ranked by the respondents as the major obstacles with 90,07% of the responses being in agreement with the statement. Agreement with the geographical location of institutions of higher learning and their admission policies is at 66,79% and 66,66% respectively. It is not surprising that money has been identified as a major obstacle to Higher Education considering that it has earlier been pointed out that the majority of South Africans live in poverty (DoE, 1997(a): 7).

The responses also indicate that the respondents are of the view that unemployed persons (item 2.6), out-of-school youth (item 2.2) and working adults (item 2.4) are affected by the lack of education opportunities to more or less the same extent. Agreement with the items pertaining to these groups of persons range between 80% and 83%. This is in agreement with earlier

observations that the majority of workers in South Africa are in the semiskilled category and that most of the unemployed are young persons with nine or more years of schooling and older persons with little education (Central Statistics, 1996: 10.5; see also, DoE, 1997(a): 29). Educationally disadvantaged students (item 2.9) are, according to the respondents, affected to a lesser extent since only 68,56% of the respondents show agreement with the item.

### 5.4.2.2 Views of Respondents on Research Question 2

Items 2.11 to 2.20 of the questionnaire were intended to solicit the response of the respondents to research question 2, namely,

# "Would residents of the Eastern Free State be in favour of the establishment of community colleges in their region?"

The total number of responses, the frequencies of the responses and their percentages are as indicated below in Table 5.4 below:

# Table 5.4: Responses to Items 2.11 to 2.20 of the Questionnaire

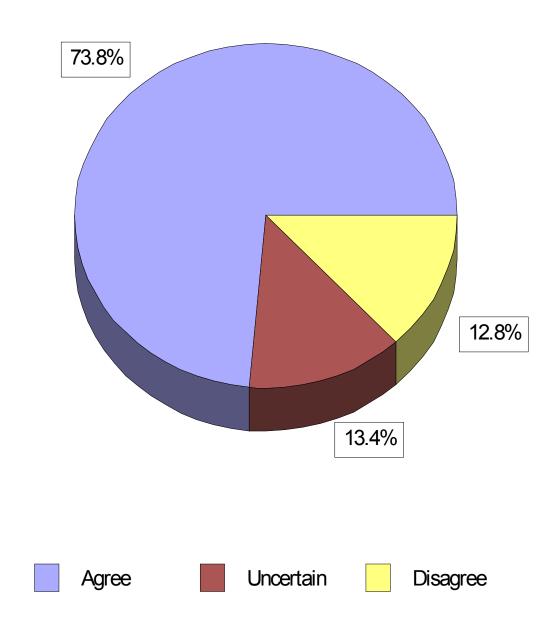
Key: S.D. = Strongly Dis	sagree. D = Disagree.	U = Uncertain, A = Agree	e. S.A = Stronalv Aaree
			,

Statement		S.D.	D	U	А	S.A.	Total
2.11 It would be advisable to	Frequencies	2	5	12	84	178	281
introduce community colleges in the Eastern Free State.	Percentage	0,71	1,78	4,27	29,89	63,35	
2.12 Community colleges would	Frequencies	2	4	18	95	163	282
be an appropriate strategy to broaden education opportunities in the Eastern Free State.	Percentage	0,71	1,42	6,38	33,69	57,8	
2.13	Frequencies	9	11	47	88	127	282
Some of the existing education institutions in the Eastern Free State should be converted into community colleges.	Percentage	3,19	3,90	16,67	31,21	45,04	
2.14 Community college programmes will help to keep over-age students	Frequencies	3	7	18	112	141	281

out of ordinary secondary schools.	Percentage	1,07	2,49	6,41	39,86	50,18	
2.15 Community colleges will become second-class	Frequencies	36	47	59	87	51	280
institutions keeping disadvantaged students away from universities and technikons.	Percentage	12,86	16,79	21,07	31,07	18,21	
2.16 The establishment of	Frequencies	56	73	55	58	41	283
community colleges will only bring about insignificant changes in the education system of the Eastern Free State.	Percentage	19,79	25,8	19,43	20,49	14,49	
2.17 Community colleges could form the link	Frequencies	5	8	19	137	113	282
between secondary schools and universities and technikons.	Percentage	1,77	2,84	6,74	48,58	40,07	

2.18 Community colleges would ease the pressure on universities and technikons	Frequencies	6	23	45	114	95	283
by diverting ill-prepared students to cheaper intermediate programmes.	Percentage	2,12	8,13	15,9	40,28	33,57	
2.19 American community	Frequencies	27	25	79	85	67	283
college models should be used in the Eastern Free State to enable us to respond to local needs.	Percentage	9,54	8,83	27,92	30,04	23,67	
2.20 It would be a good idea for you to encourage your relatives / friends to	Frequencies	7	6	27	116	126	282
register at a community college should one be opened in your area.	Percentage	2,48	2,13	9,57	41,13	44,68	
Totals For Items 2.11- 2.20	Frequencies	153	209	379	976	1102	2 819
	Percentage	5,43	7,41	13,44	34,62	39,09	

Figure 5.7: Summary of the Responses to Items 2.11-2.20



of the Research Questionnaire

Analysis of the responses to the items as portrayed in Tables 5.4 and in Figure 5.7 indicates that the majority of the respondents are in favour of the establishment of community colleges in the Eastern Free State. Of the 2 819 responses to items in this section 2 078, which is 73,71% of the total, indicate a positive inclination towards the idea.

Item 2.11, which suggested that it would be a good idea to introduce community colleges in the Eastern Free State, was positively responded to by 93,4% of the respondents. Of these, 63,5% strongly agreed with the suggestion. This item attracted the highest percentage, in the whole questionnaire of responses in the "Strongly Agree" category and the 3<sup>rd</sup> lowest in the "Uncertain" category. Only seven respondents, i.e., 2,9% disagreed with the suggestion.

Item 2.20 was included among items in this category in order to find out whether the respondents would be prepared to encourage their friends and relatives to attend community colleges if established in the region. A negative response to the statement would imply mistrust of community colleges. The fact that 85,1% of the responses were positive confirms the positive inclination towards community colleges observed in item 2.11.

Four possible advantages of community colleges were suggested in items 2.12, 2.14, 2.17 and 2.18. Among these, the broadening of educational opportunities (item 2.12) was the most favoured by the

respondents with 91,9% of the responses being positively disposed towards the statement. This is an interesting observation considering the fact that according to Witt *et al.* (1995: xii, see also, Parnell, 1993: 83) the broadening of educational opportunities is one of the reasons why community colleges were established in the USA. The second most favoured possible advantage of community colleges, by 90,04% of the respondents, is in item 2.14 relating to keeping over-age students out of ordinary secondary schools. A possible explanation for this is that, as pointed out in Chapter Four, in recent years over-aged students are being removed from ordinary secondary schools and sent to ABET centres, which are presently experiencing many problems.

It has been pointed out in Chapter Two that community colleges have their critics. There are some who believe among others that community colleges are second-class institutions whose purpose is to deny the majority of citizens entry into the prestigious universities and that their introduction in the education system is unnecessary (Nasaw, 1976: 228). Items 2.15 and 2.16 were included in this section of the questionnaire in order to find out whether there are among the respondents those who share these views. These items are the only ones in this section which were worded in the negative. Hence, when Table 5.24 was compiled, items in the "Strongly Disagree" and "Disagree" categories were respectively transferred to the "Strongly Agree" and "Agree" categories and *vice versa*.

Analysis of Table 5.4 shows that 49,28% of the respondents believe that community colleges are second-class institutions and that 29,65% of the respondents disagree. The corresponding figures relating to item 2.16 are 34,98% and 45,59% respectively. These figures show some degree of negativity towards community colleges, which is not collaborated by the figures in the rest of the tables in this category. This discrepancy could be attributed to the fact that because the statements in these two items were worded negatively, they were possibly not well understood and interpreted by some of the respondents.

It was indicated in Chapter Four that some proponents of community colleges in South Africa believe that there are sufficient educational institutions in South Africa and that some of them could be converted into community colleges instead of erecting new buildings (Strydom, 1995: 54). Thus, item 2.13 was included in this section in order to test the views of the respondents on this idea. The majority of the respondents, namely, 76,25% seem to be comfortable with the suggestion.

Lastly, as again indicated in Chapter Four, most of the advocates of the establishment of community colleges in South Africa contend that it would not be advisable to import the American community college model into South Africa. Instead South Africans should come up with their own model which will be able to respond to the needs of South Africans (Strydom, 1995: 54). Item 2.19 was therefore included in order

to solicit the views of the respondents on this idea. Analysis of the above table shows that 53,71% of the respondents disagree with this view. It can be inferred from this response that the majority of the residents of the Eastern Free State would welcome the introduction of some of the features of the American community college into a South African type of community college. It can also be seen from the table that 79 of the respondents, i.e., 27,92% are not sure of what is best. This figure is the highest in the whole questionnaire in the "Uncertain" category.

### 5.4.2.3 Views of Respondents on Research Question 3

Items 2.21 to 2.30 of the questionnaire were intended to assess the views of the respondents regarding research question 3, namely,

# "What services are community colleges to render should they be established in the Eastern Free State?"

The total number of responses, the frequencies of the responses and their percentages are indicated in Table 5.5 below:

# Table 5.5: Responses to Items 2.21 to 2.30 of the Questionnaire

Key: S.D. = Strongly Disagree,	D = Disagree, U= Uncertain	. A= Aaree S.A. =Aaree

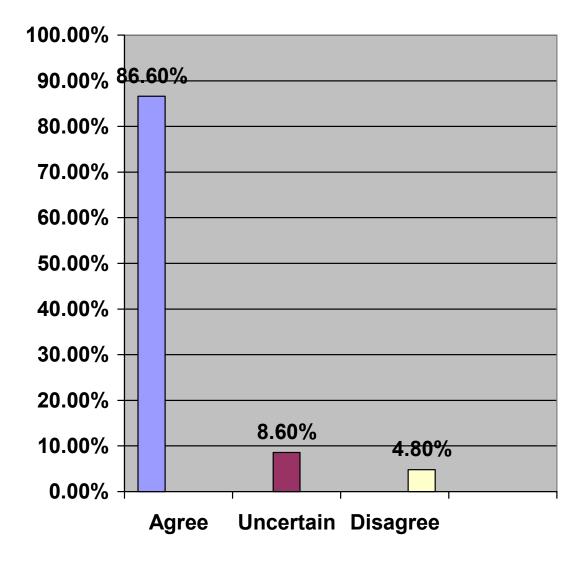
Statement		S.D.	D	U	А	S.A.	Total.
2.21 Community colleges should be used by local communities as facilities that serve their personal interest needs.	Frequencies	17	20	29	115	102	283
	Percentage	6,01	7,07	10,25	40,64	36,04	
2.22 Community colleges should	Frequencies	2	3	9	109	160	283
cooperate with the government, commerce and industry in the training of personnel for these sectors.	Percentage	0,71	1,06	3,18	38,52	56,54	
2.23 Community colleges should	Frequencies	4	8	13	103	155	283
offer courses that will enable students to obtain first-year credits at universities and technikons.	Percentage	1,41	2,83	4,59	36,40	54,77	
2.24	Frequencies	1	5	25	123	129	283
Community colleges should support students who are studying with distance education institutions.	Percentage	0,35	1,77	8,83	43,46	45,58	

Statement		S.D.	D	U	А	S.A.	Total
2.25 Adult Basic Education and Training (ABET) programmes already offered in the Eastern Free State should be placed under the control of a local community college.	Frequencies	8	10	41	116	108	283
	Percentage	2,83	3,53	14,49	40,99	38,16	
2.26	Frequencies	8	13	21	121	120	283
Community colleges should offer Further Education and Training (FET) programmes.	Percentage	2,83	4,59	7,42	42,76	42,40	
2.27	Frequencies	2	7	12	88	173	282
Community colleges should offer job-specific skills programmes to unemployed persons.	Percentage	0,71	2,48	4,26	31,21	61,35	
2.28	Frequencies	1	8	31	119	123	282
Community colleges should offer developmental education programmes to ill-prepared students who wish to pursue higher education.	Percentage	0,35	2,84	10,99	42,20	43,62	

Statement		S.D.	D	U	A	S.A.	Total
	Frequencies	2	4	29	124	124	283
2.29 Vocationally oriented education which caters for worker re- training and upgrading should be provided at community colleges.	Percentage	0,71	1,41	10,25	43,82	43,82	
2.30	Frequencies	2	9	34	132	106	283
Community colleges should offer special programmes for out - of-school youth which take into account reasons which led to their pre-mature departure from school.	Percentage	0,71	3,18	12,01	46,64	37,46	
Totals for items 2.11- 2.20	Frequencies	47	87	244	1150	1 300	2 828
	Percentage	1,67	3,08	8,63	40,66	45,96	

Figure 5.8: Summary of the of Responses to Items 2.21-2.30





Analysis of the responses to these items as illustrated in Table 5.5 and summarised in Figure 5.8, shows that the respondents are in support of the community college functions suggested in the above-mentioned items. Of the 2 828 responses to the ten items, 2 450 (86,62%) are positive

towards the suggested functions and only 134 (4,75%) are negative. It can also be seen that the positive inclination towards the suggested functions is above 75% in all the ten items.

The functions that enjoy the highest degree of support, i.e., above 80% pertain to the following issues:

- The cooperation between community colleges, the government and the private sector in the training of personnel for the two sectors (item 2.22).
- The offering of job-specific skills programmes to unemployed persons (item 2.27).
- The offering of courses that will enable students to obtain first-year credits at universities and technikons (item 2.23).
- Assistance offered to students who study with distance education institutions (item 2.24).
- The offering of vocationally oriented programmes to unemployed adults. (2.29).
- The offering of FET programmes.
- The offering of developmental education programmes.
- Provision of special programmes to out-of-school youth.

Items 2.22, 2.27 and 2.29 mentioned above relate to skills development of employed and unemployed persons. The high degree of support for the functions suggested in these items, is in agreement with the issues raised earlier in sections 4.3.1 and 4.3.2 respectively where it was

pointed out that South Africa has an acute skills shortage in certain fields and that one of the causes of the high unemployment levels in South Africa is lack of skills among many South Africans.

Further, it is not surprising that the functions suggested in items 2.23, 2.26,2.28 and 2.30 also enjoy a high level of support since, as pointed out in section 4.2, in the past many South Africans did not qualify to study at technikons and universities because most of them did not obtain senior certificates or matriculation certificates which are respectively entrance requirements in these educational institutions. It is probably hoped that the provision, by community colleges, of the functions suggested in these items will give many of those who did not qualify to study at institutions of higher learning an opportunity to do so.

In as far as the function suggested in item 2.24 is concerned, it will be recalled that as illustrated in Figure 5.5, most of the subjects constituting the sample for this study are educators attached to schools, FET institutions and offices of the Department of Education. Most of them either obtained their qualifications from distance education institutions or are currently studying with these institutions. They probably see a need for the suggested function.

The last two suggested functions in this category, namely, 2.21 and 2.25 respectively relate to the use of the community college by community members for personal interest needs and the offering of ABET

programmes by community colleges. These too, still enjoy a high degree of support though not as high as the rest of the items in this category. There is therefore overwhelming support for the community college functions proposed in this section.

### 5.4.2.4 Views of Respondents on Research Question 4

Items 2.31 to 2.40 of the questionnaire relate to research question 4, namely,

"What type of community college would best suit the needs of residents of the Eastern Free State in terms of admission requirements, articulation agreements with other types of educational institutions, accreditation, governance, scheduling and the location of delivery sites?"

The total number of responses, the frequencies of the responses and their percentages are as indicated in Table 5.6 below:

### Table 5.6: Responses to Items 2.31 to 2.40 of the Questionnaire

Key: S.D. = Strongly Disagree,	D = Disagree, U= Uncertain	. A= Aaree S.A. =Aaree

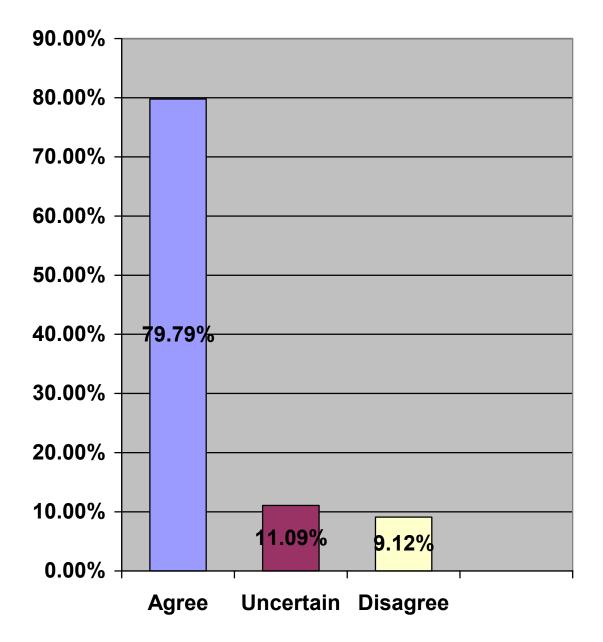
Statement		S.D.	D	U	А	S.A.	Total
2.31 All individuals beyond the compulsory school-going age of 15 years should be offered admission at community colleges.	Frequencies	13	28	45	100	97	283
	Percentage	4,59	9,89	15,90	35,34	34,28	
2.32	Frequencies	19	33	53	89	88	282
All individuals regardless of education qualifications should be offered admission at community colleges.	Percentage	6,74	11,70	18,79	31,56	31,21	
2.33 Prospective community college	Frequencies	22	44	26	119	68	279
students should be tested on admission to determine competences necessary for entry into programmes of their choice.	Percentage	7,89	15,77	9,32	42,65	24,37	
2.34 Developmental education	Frequencies	6	16	39	137	80	278
programmes should be offered to prospective community college students who do not satisfy entry criteria to programmes of their choice.	Percentage	2,16	5,76	14,03	49,28	28,78	

Statement		S.D.	D	U	А	S.A.	Total
2.35 Prior learning or experience at the workplace should be	Frequencies	11	23	33	123	89	279
recognised for admission and placement into appropriate levels at community colleges.	Percentage	3,94	8,24	11,83	44,09	31,90	
2.36	Frequencies	6	11	28	117	117	279
Students should be allowed to transfer credits from community colleges to universities and technikons and <i>vice versa</i> .	Percentage	2,15	3,94	10,04	41,94	41,94	
2.37	Frequencies	0	6	19	102	152	279
Community colleges should be accredited by a recognised body to ensure maintenance of standards.	Percentage	0	2,15	6,81	36,56	54,48	
2.38	Frequencies	2	3	29	111	134	279
Community colleges should be governed by bodies consisting of local stakeholders, role-players and interest groups.	Percentage	0,72	1,08	10,39	39,78	48,03	

Statement		S.D.	D	U	A	S.A.	Total
2.39 Community colleges should provide evening and weekend programmes for working adults.	Frequencies	1	0	11	94	173	279
	Percentage	0,36	0	3,94	33,69	62,01	
2.40 Through networks of Community	Frequencies	4	7	27	111	129	278
Learning Centres (CLCs), community college programmes should be offered at a number of venues or sites such as church buildings, universities, community halls, etc.	Percentage	1,44	2,52	9,71	39,93	46,40	
Totals for Items 2.31- 2.40	Frequencies	84	171	310	1 103	1 127	2 795
	Percentage	3	6,12	11,09	39,46	40,33	

Figure 5.9: Summary of the Responses to Items 2.31-2.40





Scrutiny of Table 5.6 and Figure 5.9 shows that the respondents are positively inclined towards the type of community college suggested in this section. It can be

seen that 79,79% of the responses agree with the suggestions made, only 9,12% disagree with them and only 11,09% are uncertain.

Items 2.31 to 2.35 solicited the views of the respondents on admission `requirements of the envisaged community college. The degree of agreement pertaining to these items is higher for items 2.34 and 2.35 than it is for the other items. These two items relate to the offering of developmental education programmes to students who do not meet the admission requirements and to the recognition of prior learning (RPL). These features are probably favoured because they are likely to open the doors of learning to many students who would otherwise not be admitted to present institutions of higher learning. The respondents are, however, a bit sceptical when it comes to ignoring age as an admission requirement and the admission of all students regardless of educational qualifications as suggested by items 2.31 and 2.32 respectively. The probable reason for this caution is that the features suggested by these items are new ideas that have not been applied to any great extent in South African institutions of learning. In as far as item 2.33 is concerned, the caution could be due to the fact that presently, many students are being denied entry into some institutions of higher learning as a result of entrance examinations.

Item 2.36 relates to articulation agreements among different institutions of learning and appears to enjoy the support of many of the respondents. This support could probably be attributed to the fact that this type of arrangement will allow for free

transfer from one type of institution to another, which will be to the benefit of students.

Item 2.37 is concerned with accreditation of the envisaged community college and enjoys the second highest support of all the items in this section. The respondents appear to be in favour of an educational institution that will award qualifications that will be recognised and respected. It is evident from the high degree of agreement with item 2.38 that in addition to wishing for accreditation by a recognised body, respondents also desire a community college, which makes provision for community participation in its governance.

Item 2.39, which deals with the scheduling of community college programmes enjoys the highest degree of agreement of all items in this category and also has the highest percentage in the "strongly agree" option. The possible explanation for support for this item is that most of the respondents are employed persons who cannot attend classes during working hours and would like opportunities to be created for attendance in the evenings and during weekends. Closely related to this item is item 2.30 that deals with the establishment of CLCs at various sites in the Eastern Free State. This suggestion is probably welcomed because it will make it possible especially for working persons to attend classes near their places of residence.

### 5.5 Conclusion

Chapter Five was concerned with an empirical investigation into the need for the establishment of community colleges in the Eastern Free State. In particular the investigation sought to determine the views of the respondents on four questions relating to the adequacy and availability of education opportunities to adults and out-of-school youth in the Eastern Free State, the establishment of community colleges in the region, the services that community colleges are to render should they be established in the Eastern Free State and the type of community college that would best suit the needs of the residents of the Eastern Free State. The findings of this investigation are summarised below.

- The responses to items pertaining to research question 1 indicate that in the opinion of the respondents there are insufficient educational opportunities available to adults and out-of-school youth in the Eastern Free State. One of the major reasons for this lack of educational opportunities as identified by the respondents, is the fact that the fees charged at most of the present educational institutions are unaffordable to most of the residents.
- In the light of the above finding, it would be expected that the respondents would welcome the introduction of a new and cheaper type of educational institution in their region. This is indeed the case as manifested by their overwhelming support of the questionnaire items pertaining to research question 2, which were intended to solicit their views on the establishment of community colleges in the Eastern Free State. It was explained in the covering letter accompanying the

questionnaires that one of the distinguishing features of the community college is charging lower fees in comparison with Higher Education institutions.

- There is overwhelming support for the suggested functions of community colleges. The functions that are mostly supported are those which relate to skills development and those that are likely to open the doors of learning to people who do not qualify to study at institutions of higher learning such as universities and technikons.
- The respondents are in support of a community college which:
  - Has admission policies that favour prospective students who do not qualify
     for admission in traditional Higher Education institutions.
  - Allows students to transfer from the community college to other types of educational institutions and *vice versa*.
  - Is accredited by a recognised body.
  - Is easily accessible in terms of its location and scheduling.

Chapter Five has shown that in the views of the respondents, there are insufficient educational opportunities available to the residents of the Eastern Free State. As a result, they would welcome the introduction of community colleges in the region. It has also been found that the respondents are happy with the suggested services of community colleges as well as with the proposed features of the envisaged community colleges. Chapter Six will deal with recommendations based on the above findings, the findings of Chapters Two to Four and conclude with suggestions for further research.