

**CRITERIA AND GUIDELINES FOR DISTANCE
EDUCATION TO SATISFY SECONDARY SCHOOL
TEACHERS' DIDACTIC-PROFESSIONAL NEEDS
RELATED TO OUTCOMES-BASED EDUCATION**

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PHILEMON MARUBINI SIKHAVHAKHAVHA

DEDICATION

This study is dedicated to:

- my late parents whose interest and concern about my schooling is still in my mind;
- the late ROBERT NKHANEDZENI SIBARA whose encouragement and support will never be forgotten;
- my children, MUVHAULAWA, MMBULAHENI, ALUWANI, TAKALANI, RUDZANI and MADALA, who missed my fatherly attention, but never stopped showing their love, understanding and concern;
- my wife SOPHIE who stood by me through thick and thin, and
- all the Sikhavhakhavhas dead or alive.

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- Mrs. S.C. de Bruyn who helped me with the typing, structuring and layout of the thesis.
- Ms J.A. Brönn for editing the manuscript.

SOLI DEO GLORIA

TO WHOM IT MAY CONCERN

I hereby declare that I have edited the thesis of Mr P.R. Sikhavhakhavha.

Certain alterations and corrections have been suggested. However, since I have not seen the final product, I have no proof that these suggestions have been followed and cannot be held accountable for faults that may not have been corrected.

Yours

A handwritten signature in black ink, consisting of a large, stylized 'J' followed by 'A' and 'B', with a long horizontal line extending to the right.

(Ms JA Bronn, MA. Member no.448 of the SA Institute for Translators and Interpreters)

ABSTRACT

CRITERIA AND GUIDELINES FOR DISTANCE EDUCATION TO SATISFY SECONDARY SCHOOL TEACHERS' DIDACTIC-PROFESSIONAL NEEDS RELATED TO OUTCOMES-BASED EDUCATION

There are vast differences between traditional content-based education and transformational outcomes-based education. For example, in content-based education teachers are viewed as the main sources of knowledge whereas in OBE teachers are viewed as facilitators of learning. In content-based education, assessment mostly focuses on the knowledge aspect of learners, rather than on skills, attitude and values. Teachers trained for traditional teaching should somehow be assisted to adjust to the outcomes-based way of teaching.

This study firstly wants to identify the didactic-professional needs related to OBE of secondary school teachers in the Venda region of the Limpopo Province. The study identifies two categories of didactic-professional needs, namely:

- Needs to improve secondary school teachers' academic competence
- Needs to improve secondary school teachers' professional competence.

The second objective of this study is to analyse and evaluate current distance education practice based in a printed format as means to satisfy secondary school teachers' didactic-professional needs related to OBE.

The third objective of this study is to investigate the effectiveness of distance education based on print to satisfy the Limpopo Province Venda region secondary school teachers' didactic-professional and academic needs related to OBE to determine criteria and guidelines to this effect.

A stratified systematic sample of 331 secondary school teachers and managers, including 148 persons who are or have already been involved in

distance education, was selected to participate in the study. Data were collected through the use of a questionnaire and interviews with selected persons. Quantitative analysis of data employed a factor analysis to determine significant factors to work with. Cronbach's Coefficient Alpha to establish reliability of instruments, and Cohen's Criterion of effect size to determine significance of differences were used.

The main findings of the study are:

- The following six factors are regarded as important to satisfy secondary school teachers' didactic-professional needs:
 - Learning strategies centring around learner activities
 - Learner-centred assessing strategies
 - Learners' performance assessing strategies
 - Outcomes and methods of achieving outcomes
 - Educator centred teaching strategies
 - Learner- centred teaching strategies.
- Counselling, tutoring and preparation for study are important in distance education to satisfy secondary school teachers' didactic-professional needs related to OBE. However, counselling and preparation for study sometimes occur in the distance education currently available in the region, particularly in distance education programmes offered through an agent for a university.

The findings further show certain differences with regard to teachers' needs and their satisfaction according to the experience, the nature of initial professional training, and the level of the current academic qualifications of the teachers.

Finally the study recommends a plan of action to provide distance education based on print to satisfy the didactic-professional needs related to OBE of the Venda region secondary school teachers in Limpopo. The main elements of the plan include:

- Effective contact sessions with lecturers.
- Regular tutorial sessions under guidance of facilitators (tutors).
- A multi-media approach.

- Access to counselling and study guidance.
- Relevant and integrated summative and formative assessment.
- Efficient communication between the academic institution involved and the agent that acts on their behalf (where applicable).

Words for indexing:

Distance education; teacher education; professional development; outcomes-based education; secondary school education.

OPSOMMING

Kriteria en riglyne vir afstandonderwys ter bevrediging van sekondêre skoolonderwysers in Limpopo se didakties-professionele behoeftes in verband met uitkomsgebaseerde onderwys.

Daar bestaan groot verskille tussen tradisionele inhoudgebaseerde en transformasionele uitkomsgebaseerde onderwys (UGO). Met inhoudgebaseerde onderwys word onderwysers byvoorbeeld as primêre inligtingsbronne beskou, terwyl hulle in UGO as fasiliteerders van leer beskou word. In inhoudgebaseerde onderwys fokus assessering hoofsaaklik op die kennisaspek van die leerder en nie op vaardighede en waardes ook nie. Gevolglik het onderwysers wat vir tradisionele onderrig opgelei is 'n behoefte aan ondersteuning om by uitkomsgebaseerde onderrig aan te pas.

Die eerste studiedoel is om sekondêre skoolonderwysers in Limpopo se UGO-verwante didakties-professionele behoeftes te identifiseer. Die volgende twee kategorieë behoeftes is geïdentifiseer:

- Behoeftes om sekondêre skoolonderwysers se akademiese bevoegdheid te verbeter.
- Behoeftes om sekondêre skoolonderwysers se professionele bevoegdheid te verbeter.

Die tweede studiedoel is om drukwerkgebaseerde afstandonderwys as middel om sekondêre skoolonderwysers se geïdentifiseerde UGO-verwante didakties-professionele en akademiese behoeftes te bevredig, te ontleed en te evalueer.

Die derde studiedoel is om die doelmatigheid van huidige drukwerkgebaseerde afstandonderwysprogramme om sekondêre skoolonderwys in die Limpopo se UGO-verwante didakties-professionele behoeftes te bevredig, te ondersoek, ten einde kriteria en riglyne in hierdie verband te stel.

'n Gestratifiseerde sistematiese steekproef van 331 sekondêre skoolonderwysers in Limpopo, insluitend 148 persone wat met afstandonderwys besig is of was, is gekies om aan die ondersoek deel te neem. Data is deur middel van 'n vraelys en onderhoude met geselekteerde persone uit genoemde groep ingesamel. Die kwantitatiewe data-ontleding berus op 'n faktorontleding om wesenlike faktore om mee te werk te bepaal. Cronbach se alfa-koëffisiënt om betroubaarheid van meetinstrumente te bepaal en Cohen se kriterium vir effekgrootte om beduidendheid van verskille te bepaal, is gebruik .

Die hoofbevindinge van die ondersoek is:

- Die volgende ses faktore word as belangrik beskou ten einde sekondêre skoolonderwysers se UGO-verwante didakties-professionele behoeftes te bevredig:
 - Leerstrategieë wat op leerderaktiwiteite berus
 - Leerdergesentreerde assesseringstrategieë
 - Leerderprestasie-assesseringstrategieë
 - Uitkomste en metodes ter bereiking daarvan
 - Onderwysergesentreerde onderrigstrategieë
 - Leerdergesentreerde onderrigstrategieë.
- Berading ("counselling"), groeponderrig ("tutoring") en voorbereiding vir studie is belangrik in afstandonderwys om sekondêre skoolonderwysers se UGO-verwante didakties-professionele behoeftes te kan bevredig. Berading en voorbereiding vir studie kom soms voor in huidige afstand-onderwysprogramme in die betrokke streek, veral in universiteitsprogramme wat deur middel van 'n agent gelewer word.

Die bevindinge toon bepaalde verskille ten opsigte onderwysers se behoeftes en die bevrediging daarvan deur afstandonderwys volgens die ervaring, aard van aanvanklike professionele opleiding en vlak van akademiese kwalifikasie van die onderwysers.

Ten slotte kom die studie tot 'n plan van aksie waarvolgens drukwerkgebaseerde afstandonderwys voorsien kan word om sekondêre skoolonderwysers in Limpopo se UGO-verwante didakties-professionele behoeftes te bevredig. Die hoofmomente van hierdie plan sluit in:

- Doelmatige kontaksessies met dosente.
- Gereelde groeponderrigssessies onder leiding van fasiliteerders ("tutors").
- 'n Multi-mediabebanding.
- Toegang tot berading en studiebegeleiding.
- Relevante en geïntegreerde summatiewe en formatiewe assessering.
- Doelmatige kommunikasie tussen die betrokke akademiese instellings en die agente wat namens hulle optree (waar toepaslik).

Woorde vir indeksering:

Afstandonderwys; onderwyseropleiding; professionele ontwikkeling; uitkomsgebaseerde onderwys; sekondêre skoolonderwys.

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CHAPTER 1

ORIENTATION TOWARDS THE RESEARCH PROGRAMME

1.1 INTRODUCTION

This chapter aims at giving an orientation towards the research programme. The chapter starts with the statement of the research problem. This is followed by the objectives, research methodology, significance of the proposed research and the arrangement of the report.

1.2 PROBLEM STATEMENT

The Limpopo Province, particularly the Venda region, is not without secondary school teachers who are at sea with outcomes-based education (OBE). The majority of the secondary school teachers in the region have been trained in the traditional way of teaching which, according to Slavin (1996:200), influences learners to work in isolation or on their own and to compete for good grades, teacher approval and recognition. Slavin (1996:200) further states that traditional teaching may influence learners to discourage each other from working hard when they have to compete on an individual basis.

In a document on OBE, the Department of Education (DoE) (1997b:7) states that teachers trained in the traditional way of teaching cause learners to learn by rote and to rely on memory skills. The above suggests that teachers trained in the traditional way of teaching are not adequately prepared to implement OBE effectively.

An outcomes-based approach is learner-centred and to be more specific, a results-oriented design, based on the belief that all individuals can learn (DoE, 1997b:17). Van der Horst & McDonald (1998:19) complement the above by maintaining that OBE is an educational approach which requires teachers and learners to focus on the following aspects:

- The desired end results (outcomes) of each learning programme; and
- Content and processes that guide the learners to the end results.

Potenza and Jansen (1998:52) see OBE as an approach to make schooling as relevant to real life as possible. The above statement may imply that OBE brings new methods and ways of working into the classroom that change the set-up of traditional teaching. The success of OBE therefore depends on the quality of teachers (DoE, 2000).

According to the Ministerial Review Committee's Report (DoE, 2000), OBE is based on the principle that decisions about the learning programme should be driven by outcomes which learners should demonstrate at the end of their learning experience as opposed to the inputs of the traditional syllabus-driven process. What the Ministerial Review Committee's Report is saying above implies that OBE is challenging the traditional syllabus-driven curriculum. If so, teachers in the Limpopo Province may need training of some kind to implement OBE in the classroom. Current in-service training available in the Limpopo Province does not seem to fully satisfy secondary school teachers' didactic-professional needs stemming from the curricular changes required by OBE. This is complemented by the Ministerial Review Committee's Report (DoE, 2000) which maintains that many teachers appear to leave training workshops for implementation of the new curriculum not knowing what it is they ought to teach.

As has been stated in the paragraph above, the current training of teachers does not seem to adequately satisfy the didactic-professional needs of teachers in respect of curricular changes, such as required by OBE. Distance education could equip serving teachers with the skills and competence required by OBE without them being absent from classes for their lessons. Distance education enables people to study without having to disrupt their work or family lives in order to attend classes (Evans & Nations, 1996:4; Burge & Roberts, 1998:4). Rowntree (1996:9) maintains that learning material in distance education is compiled in such a way that students can learn from them satisfactorily with little help from their instructors. According to Orivel

(1996:843) and Evans and Nations (1996:5), distance education takes many forms such as based on print, audio and video materials, computer communication or telecommunication or all the above. This study focuses on distance education based on print because it is the mode of distance education which is accessible to all the people in the Limpopo Province. Distance education offers significant advantages to the learner, for example

- OBE endorses the concept of life-long learning (Van der Horst & McDonald, 1997:5) and distance education could help serving teachers in this regard by enabling them to improve their academic-professional competence.
- Lubisi, Parker and Wedekind (1998:23) say that in OBE traditional assessment has been changed to become a means through which learners are able to monitor their own development. Distance education could enable serving teachers to master assessment in an outcomes-based way while they are not at the institutions offering distance education.

This study will focus on the following problem, particularly in the context of secondary schools, i.e. senior phase (GET) and FET:

- How can the didactic-professional needs related to OBE of secondary school teachers in the Venda region of the Limpopo Province be met through distance education?

The research problem can be divided into the following sub-problems:

- What are the didactic-professional and academic needs related to OBE of secondary school teachers in the Venda region of the Limpopo Province?
- What role can distance education play to satisfy these secondary school teachers' didactic-professional and academic needs related to OBE?
- How effective is distance education with respect to the satisfaction of these needs of secondary school teachers in the Limpopo Province?

1.3 GOALS

The goals of this study are:

- To identify the didactic-professional and academic needs related to OBE of the secondary school teachers in the Venda region of the Limpopo Province.
- To describe and assess the current role of distance education in satisfying these secondary school teachers' didactic-professional and academic needs related to OBE.
- To investigate the effectiveness of distance education to satisfy the Limpopo Province Venda region secondary school teachers' didactic-professional and academic needs related to OBE.
- To identify strategies that can be used to improve distance education.

1.4 METHODOLOGY

1.4.1 Literature study

As far as possible primary sources were used to obtain information on secondary school teachers' improvement of academic-professional competence through distance education. A NEXUS and DIALOG search were undertaken (at Ferdinand Postma Library of North-West University at Potchefstroom) to identify suitable and recent sources to work from. The following key words were used:

Teacher education; distance education; outcomes-based education (OBE); Curriculum 2005; teacher training; teaching strategies; learning strategies; adult learning; competence and performance; didactic-professional needs; teacher knowledge; didactic knowledge, skills and attitudes; secondary school; school education.

1.4.2 Empirical study

1.4.2.1 Design

An *ex post facto* design was used.

Data for this study were collected by means of a field survey through the use of a Likert-type questionnaire supplemented by

- (1) structured interviews with selected teachers and school managers who had studied and completed their studies through distance education; and
- (2) structured discussions with experts in institutions offering distance education

The aim of the field survey was to :

- (1) Determine the didactic-professional needs related to OBE of secondary school teachers in the Venda region of the Limpopo Province;
- (2) Determine the current contribution of distance education in satisfying these teachers' didactic-professional needs related to OBE; and
- (3) Identify strategies to improve the situation, if needed.

The aim of the interviews and discussions was to:

- (4) Find effective strategies for distance education to satisfy the identified didactic-professional needs related to OBE of the Limpopo Province's Venda region secondary school teachers.

1.4.2.2 Population and sample

The population was all the secondary school teachers and school managers in the former Venda in the Limpopo Province [N = approx. 2400]. The population included approximately 240 teachers who were already improving their academic-professional competence through distance education (Anon, 2000). In accordance with Leedy and Ormrod (2001:221), a stratified systematic sample of at least 240 secondary school teachers and 60 school managers is sufficient. For the purpose of the investigation, a sample of 331 was drawn of which 22 did not respond. The final sample of 249 teachers and 60 school managers included 148 persons who were already involved in distance education.

The selected 148 were used to realise aims 1.4.2.1 (2), (3) above. Based upon their responses to the questionnaires, a feasible number of 10 candidates to be interviewed had been identified to realise aim 1.4.2.1 (4) above.

Structured discussions with 7 experts in the field of distance education were conducted.

1.4.2.3 Statistical techniques

Descriptive statistics was used (*cf*, 5.6). The assistance of the Statistical Consultancy Service of the North-West University (Potchefstroom Campus) was sought.

1.4.3 Research procedure

The procedure followed in this research was as follows:

- (1) Execution of the literature study
- (2) Construction of the questionnaire
- (3) Pilot study under secondary teachers and managers who were not included in the sample
- (4) Finalisation and distribution of the questionnaire
- (5) Conducting interviews and discussions
- (6) Processing and interpreting the data collected
- (7) Formulation of strategies for distance education, conclusions and recommendations.

1.4.4 Ethical matters

Permission was granted by the regional education authorities. No one was forced to participate. Collaboration with all those that eventually participated in the research was sought. Participants were assured that their information would be treated with confidentiality and used for research purposes only.

The research undertook to give the feedback to the participants at the end of the project.

1.5 SIGNIFICANCE OF THE RESEARCH

The research intends to be of help in removing some of the stumbling blocks in the implementation of OBE in secondary schools in the Limpopo Province. Furthermore, it can reveal guidelines with respect to the utilisation of distance education to effectively implement educational reform in rural areas.

1.6 ARRANGEMENT OF REPORT

Chapter 1: Orientation towards the research programme.

Chapter 2: Outcomes-based education in South African secondary schools.

Chapter 3: Didactic-professional needs of secondary school teachers regarding outcomes-based education.

Chapter 4: The role of distance education in satisfying teachers' didactic-professional needs.

Chapter 5: Research methodology.

Chapter 6: Empirical investigation.

Chapter 7: Conclusion and recommendations.

1.7 SUMMARY

This chapter introduced the problem under investigation. The research objectives were stated and the methodology for achieving the objectives were explained. The structure of the report was indicated.

The next chapter (Chapter 2) will concentrate on outcomes-based education in South African secondary schools.

CHAPTER 2

OUTCOMES-BASED EDUCATION IN SOUTH AFRICAN SECONDARY SCHOOLS

2.1 INTRODUCTION

The aim of this chapter is to identify the implication of the current change in the school curriculum on secondary school teachers. The chapter starts by describing the curriculum policy of education prior to 1994. This is followed by the general background to outcomes-based education and the application of outcomes-based curriculum in South African schools.

2.2 THE CURRICULUM POLICY OF EDUCATION PRIOR TO 1994 IN SOUTH AFRICA

Prior to 1994, South Africa had a centralised curriculum policy which, according to Jansen (1999:4), was described as racist, eurocentred, sexist, authoritarian, prescriptive, unchanging, context blind and discriminatory. Different departments of education existed for different racial groups because of the curriculum policy which was discriminatory. What has been said above may suggest that the curriculum policy of education in South Africa before 1994 was influenced by a political ideology of separate development, which was based on anthropological philosophy, and a content-based approach to school education.

Because of the anthropological ideology of separate development, the content-based nature of the curriculum and the eurocentredness of content, the curricula in the separate Departments of Education did not take the culture of the majority of learners into consideration. Martin and Faxas (1994:1227) maintain that the teaching of subject matter based on foreign culture leads to discontinuity between the behaviours children learn that are appropriate in their home and community environment and the expectations held by school personnel. That may be the cause of the high dropout rate which used to be

registered amongst black learners during those times as well as dissatisfaction with school education that existed in those years .

After the election of 1994 the Ministry of Education produced a series of white papers of which the most important was the White Paper on Education and Training of 1995 (Jansen, 1999:7). The aim of this White Paper was to address the imbalances in the curriculum policy of education.

2.3 GENERAL BACKGROUND TO OUTCOMES-BASED EDUCATION (OBE)

2.3.1 Orientation

OBE came into being because of the shortcomings of content-based education. Many school leavers in content-based education do not possess the skills to meet the challenge of the real world once they leave school (Claassen, 1998: 34). The Ministerial Review Committee (DoE, 2000), in its report, sees outcomes-based education as an alternative approach to education which has its roots in the West. OBE means focusing and organising everything in an educational system around what is essential for all students to be able to demonstrate competence at the end of their learning experience (Spady, 1994:1). The keys to having an outcomes-based system according to Spady (1994:1) are:

- developing a clear set of learning outcomes around which all of the system's components can be focused; and
- establishing the conditions and opportunities within the system that enable and encourage all students to achieve those essential outcomes.

In general, OBE is based on the claim of the early behaviourists such as John Watson that anyone can be taught anything given good support and sufficient time in his or her learning activity (Malcolm, 1999: 83). The above implies that if the learner does not achieve the desired outcome by the end of the learning experience, the teacher and learner need to try again from a different angle.

Malcolm (1999:83) is also of the opinion that in OBE all learners have the same right to progress.

According to Spady (1994:76), OBE can be divided into the following three approaches according to the kinds of performances in the culminating outcomes:

- Traditional OBE which puts emphasis on knowledge and skills in subjects such as English, Geography and Physical Science. In addition to the above, Kramer (1999:32) maintains that, in traditional OBE, teachers use the conventional forms of assessment to gather information about how well learners have learned to cope with what has been taught in class. In traditional OBE, teachers may rely on only tests and examinations to gather information about how learners have mastered what had been taught. The above is supported by “Curriculum 2005 in a Nutshell” (DoE, 2001:8) which sees the disadvantages of traditional OBE as the following:
 - It does not give learners or teachers an understanding of why learning is important;
 - It focuses mainly on either doing or recalling content; and
 - Teachers do not change the learning environment; things carry on just as before the outcomes were defined.
- Transitional OBE puts much emphasis on broad competence such as problem solving and utilisation of technology. “Curriculum 2005 in a Nutshell” (DoE, 2001:8) sees transitional OBE as differing slightly from traditional OBE in that:
 - Planning in transitional OBE begins with the critical and developmental outcomes and the syllabus is simply used to achieve the outcomes;
 - It always asks whether the outcomes have any value in society;
 - It focuses on integrating knowing, doing and feeling; and

- It requires changes in the working environment.

Transitional OBE's shortcoming, according to "Curriculum 2005 in a Nutshell" (DoE, 2001:8), is that it does not lead to enough real changes in the educational system.

- Transformational OBE, according to the Ministerial Review Committee (DoE, 2000), emphasises learning shaped by outcomes, integrated knowledge and formative assessment. This could imply that, in order to find evidence that learners are able to choose and use the relevant and appropriate skills, knowledge and values that are attached to the various roles they will assume in life, various forms of assessment need to be taken into consideration by the teachers. In South Africa, the Department of Education decided to go for Transformational OBE which implies that South Africa has jumped Traditional and Transitional approaches and adopted the newest radical form of OBE (DoE, 1997a:29). Teachers trained for conventional education are the implementors of an outcomes-based curriculum in the classroom and this could make them not competent enough to teach this curriculum. The transformational outcomes-based curriculum in South Africa is guided by critical and developmental outcomes. The Revised National Curriculum Statement (DoE, 2002:11) divides critical and developmental outcomes into critical and developmental outcomes.

- Critical outcomes

Van der Horst and McDonald (1998:21) maintain that critical outcomes state that all learners should be able to do the following:

- Identify and solve problems and make decisions by using critical and creative thinking;
- Work with others as a member of a team, group, organization or community;
- Organize and manage themselves and their activities responsively and effectively;

- Collect, analyze, organize and critically evaluate information;
- Communicate effectively, using visual, mathematical and/or language skills in various modes;
- Use science and technology, showing responsibility towards the environment and the health of others; and
- Demonstrate an understanding of the world as a set of related systems by recognizing that problem solving content does not exist in isolation.

- Developmental outcomes

The Revised National Curriculum Statement (DoE, 2002:11) sees developmental outcomes as intended to enable learners to :

- Reflect on and explore a variety of strategies to learn more effectively;
- Participate as responsible citizens in the life of local, national and global communities;
- Be culturally and aesthetically sensitive across a range of social contexts;
- Explore education and career opportunities; and
- Develop entrepreneurial capabilities.

All these need somehow to be taken into consideration when designing learning activities.

Outcomes-based education demands skills of teachers and learners that are quite different from those of content-based education. Claassen (1998:36) maintains that in content-based education the teachers and the curriculum are the sources of knowledge while the learner is a passive recipient of predetermined content. A document on outcomes-based education (DoE, 1997b:17) sees the outcomes-based approach as aiming at encouraging the teacher to:

- Identify what a learner is to learn;
- Base each learner's progress on demonstrated achievement;
- Accommodate each learner's needs through multiple teaching and learning strategies and assessment tools; and
- Provide each learner with the time and assistance to realize his or her potential.

In chapter 1 (*cf*, 1.2) it is stated that OBE is an educational approach which requires teachers and learners to focus on the following aspects:

- The desired end results of each learning programme; and
- Content and process that guide the learners to the end results.

Teachers who are used to be sources of knowledge could need assistance to be able to focus on the above aspects. This will be seen by a discussion of these aspects.

2.3.2 The focus on the desired end results of each learning programme

Van der Horst and McDonald (1998:19) regard the desired end results of a learning programme as the outcomes of learning. Learners will need to demonstrate what they have attained at the end of learning period, lesson, study unit or programme. The Revised National Curriculum Statement (DoE, 2002:14) sees the desired end results of a learning programme as learning outcomes derived from the critical and developmental outcomes discussed above (*cf*, 2.3.1). Wessels and Van den Berg (1998:2) maintain that the focus in the outcomes-based approach is on what learners can do when they reach a certain stage in learning rather than on a list of topics that must be covered. What has been said in the sentence above indicates one of the differences between OBE and conventional education. According to Kramer (1999:39), assessment of these outcomes of learning needs to be an ongoing process. This may imply that assessment in OBE needs to be done continuously. In addition to the above, Cilliers, Scheepers and Glover (in Van der Horst and

McDonald, 1998:19) maintain that learners in outcomes-based education need to be assessed on their daily oral and written responses in class on individual and group projects and on their activities such as the assembly of portfolios in the different learning areas. Learners in OBE may be assessed on each and every activity he or she is involved in and not only on tests and examinations. Assessment in outcomes-based education is supportive, remedial and motivational (Van der Horst and McDonald, 1998:19).

2.3.3 The focus on content and process that guides learners to the end results

According to Van der Horst and McDonald (1998:19), content and process are essential components of the outcomes-based learning programme. The above is supported by the Revised National Curriculum Statement (DoE, 2002:10) which maintains that outcomes-based education considers the process of learning as being as important as the content that has to be learned. This implies that there is no need to over-emphasise one over the other. Van der Horst and McDonald (1998:19) define content as what is learned, and process as how the content can be learned. Teachers in OBE may need to put equal emphasis on the content and on how this content can be learned by spelling out the outcomes that the learners need to achieve at the end of the teaching and learning process. The above is complimented by Van der Horst and McDonald (1998:20) who maintain that what is important in OBE is what learners are able to do with the knowledge rather than on the mere accumulation of facts.

The Revised National Curriculum Statement (DoE, 2002:12) maintains that OBE leaves room for creativity and innovation on the part of teachers in interpreting what and how to teach. The above suggests that OBE gives teachers a chance to decide on the content and the method of teaching. According to the Revised National Curriculum Statement (DoE, 2002: 14), OBE specifies knowledge, skills and value to be achieved but does not specify facts to be learned in syllabus format. The above implies that OBE only specifies knowledge, skills and values in a form of learning outcomes and assessment standards to be achieved in the teaching process but does not

prescribe learning content through which the specified knowledge, skills and values can be achieved. Learning content is left to teachers as said above. In addition to the above, OBE promotes an activity-based method of teaching which encourages active learning (DoE, 2001:20).

2.4 THE APPLICATION OF AN OUTCOMES-BASED CURRICULUM IN SOUTH AFRICA

2.4.1 Orientation

In South Africa there was an initial implementation of Curriculum 2005 which applied to GET band (Grades R to 9) (Spady & Schlebusch, 1999: 54). The Curriculum was introduced to South African schools after the new constitution of the country had been drawn up. The fundamental values of the Constitution of the Republic of South Africa, that is Act 108 of 1996, provided the basis for curriculum transformation and development in South Africa (DoE 2002:6). The Revised National Curriculum Statement (DoE, 2002:8), sees the Bill of Rights which is part of Constitution as placing pre-eminent value on equality, human dignity, life and freedom and the security of a person. The above suggests that the constitution of South Africa, amongst others, served as a basis for the introduction of Curriculum 2005 to address the imbalances amongst the citizens of South Africa. The ministerial Review Committee (2000), in its report, sees Curriculum 2005 as the Curriculum that has been developed with an outcomes-based framework. According to Spady and Schlebusch (1999: 54), the designers of curriculum 2005 had to:

- design a model to help learners of South Africa to be better prepared for the 21st century by training them in the new basics;
- recognise that South Africa is under-resourced and that a new curriculum could not depend on supplies of centrally-produced text books, etc. that is, South Africa needs to use cheap resources; and
- find a model which would bind and unify the country, giving common educational vision and addressing the core social and moral issues.

The above implies that Curriculum 2005 aims at bringing changes in the classroom situation. This is supported by the Ministerial Review Committee (2000) in its report which regards Curriculum 2005 as a political strategy that is used to drive change in education in South Africa.

The original curriculum 2005's key design features, according to the Ministerial Review Committee (DoE, 2000), are critical outcome, specific outcomes, assessment criteria, range statement, performance indicators, expected levels of performance, phase organisers and programme organisers. It was introduced to schools in South Africa in 1998 and reviewed in 2000 to assess its structure and design, accompanying teacher development processes, learning materials development to support the curriculum, provincial support to teachers in schools and implementing a timeframe (DoE, 2002:5). According to the Revised National Curriculum Statement (DoE, 2002:5), the Ministerial Review Committee's recommendations were accepted by the Council of Education Ministers in June 2000. One of the Ministerial Review Committee's recommendations (2000) in its report was that the sixty six specific outcomes, phase and programme organisers, range statement, performance indicators, and expected levels of performance are unnecessary and should therefore be dropped from the new curriculum. The Ministerial Review Committee (2000) in its report also maintains that the process of ignoring content by Curriculum 2005 is problematic, considering the fact that the teacher content is weak.

Based on the Ministerial Review Committee's findings, the Revised National Curriculum statement was established in 2002. According to the Review Committee (2000), the key design features of the Revised National Curriculum Statement are critical and development outcome, learning area statements, learning outcomes and assessment standards.

After the publication of the Revised National Curriculum Statement, the Department also published the National Curriculum Statement for the Further Education and Training (FET) band in 2003 which is to be implemented in 2006. The Outcomes-based Curriculum for Further Education and Training band is built on the same OBE principles that underpin the Revised National

Curriculum Statement (DoE 2003: 1). In this study the focus is on the implementation of outcomes-based curriculum for grade 8 to grade 12 which include part of the senior phase and the whole of further education and training.

It is stated in one of the paragraph above that the Outcome-based Curriculum was introduced to drive change in the education system of South Africa. The above is complemented by McDonald and Van der Horst (1997:6) who see the outcomes-based curriculum in South Africa as aiming at developing thinking, problem-solving citizens who will be empowered to participate in the development of the country in an active and productive way. The above suggests that the aim of the outcomes-based curriculum in South Africa is to improve the economy by educating creative and critical citizens.

2.4.2 Principles on which outcomes-based curriculum in South African schools is based on

According to Curriculum 2005 (DoE, 1997a:4) as well as the National Curriculum Statement (DoE, 2003: 1), the outcomes-based curriculum in South African schools is based on the following principles:

- Human resources development;
- Learner-centredness;
- Relevance;
- Integration;
- Progression;
- Differentiation and learner support;
- Nation-building and non-discrimination;
- Critical and creative thinking;
- Credibility; and

- Quality assurance.

These principles are dealt with in the subsections that follow.

2.4.2.1 Human resources development

Curriculum 2005 (DoE, 1997a:4) sees an outcomes-based curriculum as being based on a development of lifelong learning. The above implies that the outcomes-based curriculum aims at equipping the learners with knowledge and skills required by business and industry.

2.4.2.2 Learner-centredness

According to the Curriculum 2005 policy document (DoE, 1997a: 14), the outcomes-based curriculum puts the learner first in the development of the learning programme and material. Different learning styles and rates of the learning situations are acknowledged and accommodated, both in the learning situation and in the attainment of qualifications (DoE, 1997a:4). This suggests that learners are given an opportunity to finish the learning task at their own pace. In addition to the above, learners in an outcomes-based curriculum are encouraged to develop their own insights and solutions rather than being passive recipients of predetermined content (Claassen, 1998:37). Learners may be encouraged in the outcomes-based curriculum to approach the learning task in a critical and creative way.

2.4.2.3 Relevance

The outcomes-based curriculum strives for learning programmes that are relevant and appropriate to current and anticipated future needs of individual learners (DoE, 1997a:4). The above suggests that learning programmes of the outcomes-based curriculum equip learners with the relevant competence and skills required in the economy of South Africa at any point in time. The document on outcomes-based education (DoE, 1997b:14) complements the above by maintaining that the outcomes-based curriculum in South Africa aims at assisting learners with their national economic, social and political needs. The outcomes-based curriculum is based on the vision for South Africa

which encompasses a prosperous, truly united, democratic and internationally competitive country with literate, creative and critical citizens (DoE, 1997a:1).

2.4.2.4 Integration

The outcomes-based curriculum strives for an integrated approach to education and training and to teaching of the learning areas. According to Curriculum 2005 (DoE, 1997a:4), an integrated approach to education and training implies a view of learning which rejects a rigid division between academic and applied knowledge. An integrated approach to the teaching of learning areas may suggest that content, which had previously been regarded as belonging to physical science in conventional education, can now be taught in language lessons or to topics linked to different learning areas.

2.4.2.5 Progression

Learners in the outcomes-based curriculum are able to progress to other levels of qualification by mastering prescribed learning outcomes rather than through age and course cohorts (DoE, 1997a:5). The above suggests that in an outcomes-based curriculum learners are able to progress to the next learning grade by mastering the learning outcomes prescribed for them. The Revised National Curriculum Statement (DoE, 2002:13) supports the above by maintaining that learners in an outcomes-based curriculum progress to the next grade by activities and tasks which require the use and application of values, skills and knowledge within and across learning areas.

2.4.2.6 Differentiation and learner support

Learning programmes in an outcomes-based school curriculum in South Africa facilitate the creation of opportunities for all learners, including those who are disabled in some way or other (DoE, 1997a: 5). This suggests that in an outcomes-based curriculum each learner is given the assistance he or she requires to be able to achieve the learning outcomes set by the teacher. An outcomes-based school curriculum aims at giving all learners chances to adulthood where they will be able to serve their community to the best of their ability. In addition to the above, Curriculum 2005 (DoE, 1997a:5) maintains that an outcomes-based curriculum does not deny that there are educational

differences amongst individuals. In the general background of outcomes-based education it is stated that OBE is of a view that anyone can be taught anything, given good support in his learning, and sufficient time (*cf.* 2.3.1). Slow learners may need more time than faster learners to achieve the learning outcome.

2.4.2.7 Nation-building and non-discrimination

According to Curriculum 2005 (DoE, 1997a:5), the outcomes-based school curriculum in South Africa encourages the development of:

- mutual respect for diverse religions and value systems, cultural and language traditions;
- co-operation, civic responsibility to participate in aspects of society; and
- an understanding of national, local and regional developmental needs.

Through a co-operative learning strategy and problem solving teaching strategies, which will be dealt with in chapter 3, and the teaching of a life orientation learning area to the learners, learners may learn the notion of nation-building and non-discrimination which form the basis of South Africa's constitution. In addition to the above, Fourie (1999:15) maintains that schools in OBE have the task to teach societal values and traditions to the younger generation to prepare them for adulthood.

2.4.2.8 Critical and creative thinking

Potenza and Jansen (1998:52) maintain that in an outcomes-based curriculum learners explore and develop their own values and attitudes with the teacher as facilitator. The teacher in his role as facilitator may assist those with problems in the process of achieving the learning outcomes or demonstrate what needs to be demonstrated instead of being the source of knowledge. The above is complemented by Curriculum 2005 (DoE, 1997a:5) which sees the outcomes-based approach as aiming at learning programmes that promote the learner's ability to think logically and analytically as well as holistically and laterally. The above suggests that the outcomes-based school

curriculum aims at encouraging learners to be creative and critical in their thinking.

2.4.2.9 Credibility

The outcomes-based curriculum aims at making the education of South Africa compatible with those in the rest of the world (DoE, 1997a:5). Fourie (1999:16) complements the above by maintaining that OBE strives to make education and training to have national and international value and acceptance. The above implies that outcomes-based education aims at enabling learners to acquire qualifications which are accepted everywhere in the world.

2.4.2.10 Quality assurance

Curriculum 2005 (DoE,1997a:5) sees the pillar of quality assurance as:

- promoting a quality culture in the classroom to engender an ethos of praise, acceptance of criticism and mutual respect;
- quality control which involves an auditing of the nature and standard of service delivery; and
- ongoing quality improvement.

The above implies that learners in an outcomes-based curriculum are encouraged to accept criticism from peers and also to respect each other in order to be able to achieve the prescribed learning outcomes.

2.4.3 The kind of learner and teacher that is envisaged

Vermeulen (2003:97) and the National Curriculum Statement (DoE, 2003:17) maintain that the kind of learner envisaged in this outcomes-based curriculum is one who will be imbued with the values and act in the interest of a society based on respect for democracy, equality, human dignity, life and social justice. This implies that the new curriculum takes the constitution of South Africa into consideration.

The kind of teacher that is envisaged is one who, according to DoE (2003:18) and Vermeulen (2003:97):

- is qualified, competent, dedicated and caring and
- will be able to fulfil various roles outlined in the Norms and Standards for Educators of 2000. The roles of teachers are discussed in chapter 4 (*cf*, 4.6.3.1).

2.4.4 The merging of traditional school subjects into learning areas in the senior phase

2.4.4.1 Orientation

Traditional subjects in an outcomes-based curriculum in South Africa are merged into eight learning areas in senior phase (DoE, 2002: 9). The Revised National Curriculum Statement (DoE, 2002:9) defines a learning area as a field of knowledge, skills and values which has unique features as well as connections with other fields of knowledge and learning areas brought about by an outcomes-based curriculum. The following are the learning areas brought about by the outcomes-based curriculum according to the Revised National Curriculum Statement (DoE, 2002:9):

- Languages learning area which focuses on English, Afrikaans, Venda, Tsonga, Xhosa, Zulu, Tswana, North Sotho, South Sotho, Swati, Braille and Sign Language;
- Mathematics learning area;
- Social Sciences learning area which is formed by merging History and Geography;
- Natural Sciences learning area which is formed by integrating Biology, Physical science, Physiology, Agricultural science and part of Geography;
- Technology learning area which is a new field of study brought about by the outcomes-based education;
- Arts and Culture learning, an area which is a new field of study;

- Economic and Management Sciences learning area which is formed by Integrating Economics, Business Economics and Accounting; and
- Life Orientation learning area which is also a new field of study.

The learning areas are dealt with in the subsections that follow.

2.4.4.2 Languages

The Revised National Curriculum Statement (DoE, 2002:19) sees the languages learning in South Africa as including eleven official languages together with those languages approved by the Pan South African Language Board and by the South African Certification Council (Umalusi) such as braille and sign language. The above suggests that the languages learning include, amongst others, the language of learning and teaching, home language and additional languages. Learners may need to learn at least two languages in South Africa. In a multilingual country it is important that learners reach high levels of proficiency in at least two languages and also be able to communicate in other languages (DoE, 2001:10). Mothata, Mda and Cosser (1998:30) regard a language as intrinsic to human development and central to lifelong learning. The above implies that without language the process of lifelong learning may be impossible. According to Curriculum 2005 (DoE, 1997a :13), language and language learning empower people to:

- make meaning;
- access education;
- think and express their thoughts and emotions logically, critically and creatively; and
- communicate in different contexts by using a range of register, varieties and means.

In addition to the above, Mothata *et al.* (1998:31) maintain that the advancement of multilingualism affords learners the opportunity to develop and value:

- the home language and culture in our multicultural country and in international context; and
- a shared understanding of a common South Africa culture.

2.4.4.3 Mathematics

Mathematics is an important learning area. The Revised National Curriculum Statement (DoE, 2002:21) recognises that access to mathematics is a human right in itself and is neither value nor culture free. The above suggests that no learner in South Africa needs to be denied access to mathematics. The Revised National Curriculum Statement (DoE, 2002:5) further states that the teaching and learning of mathematics in an outcomes-based curriculum incorporate contexts that can build awareness of human rights, and social, economic and environmental issues relevant and appropriate to learners. In addition to the above, the Revised National Curriculum Statement (DoE, 2002:4) maintains that teaching and learning of mathematics aim to instill in learners:

- a critical awareness of how mathematical relationships are used in social, environmental, cultural and economic relations;
- the necessary confidence to deal with a mathematical situation without being hindered by the fear of mathematics;
- an appreciation for the beauty and elegance of mathematics;
- a spirit of curiosity; and
- a love for the learning area.

The above suggests that OBE aims at making learners unafraid of Mathematics as a learning area.

2.4.4.4 Social Sciences

Curriculum 2005 (DoE, 1997a:14) sees Social Sciences as contributing to the development of responsible citizens in a cultural diverse democratic society within an interdependent world. Mothata et al. (1998:31) maintain that Social

Sciences equip learners to make sound judgements of the physical environment. The above implies that Social Sciences are just as important as any other learning area. Social Sciences involve the study of relationships between people and between people and their environment (DoE, 1997a:14). The above suggests that Social Sciences enable learners to understand the environment in which they live.

It is stated in one of the paragraphs above that Social Sciences as a learning area merges History and Geography. The Revised National Curriculum Statement (DoE, 2002:4) sees the purposes of teaching History as the development of:

- historical consciousness of racial myths and stereotypes, economic and social inequality and universal human rights and democratic values and principles;
- a sense of identity and common memory of our deliberately divided histories and civic responsibility; and
- conceptual tools to interpret and analyse events and changes in a society at different times.

The Revised National Curriculum Statement (DoE, 2002:5) sees the purpose of teaching Geography as the development of:

- understanding skills and appropriate values related to human interaction with the physical, natural, economic, social and political environment;
- a critical awareness and understanding of environmental and social issues such as power, gender and poverty in regional, national and global context;
- the ability to ask and respond to geographical questions;
- the ability to identify and recognise the significance of a range of environments on the earth; and

- an understanding of social and environmental justice that can be brought about through the action of individuals and organisations.

The above emphasizes the significance of Social Sciences as a learning area. A nation without a history and which also does not know its surrounding environment may be a dead nation.

2.4.4.5 Natural Sciences

According to the Revised National Curriculum Statement (DoE, 2002:22), the Natural Sciences as a learning area serve to promote scientific literacy. Learners in this learning area may be equipped with scientific knowledge, skills and values. This is complemented by Mothata et al. (1998:33) who maintain that the development of skills, knowledge and attitudes and an understanding of the principles and process of natural sciences:

- enable learners to make sense of the natural world;
- contribute to the development of responsible, sensitive and scientifically literate citizens;
- are for conserving, managing, developing and utilising natural resources to ensure the survival of local and global environment; and
- contribute to people creating and shaping work opportunities.

In view of its potential to improve the quality of life, learning in the Natural Sciences is made accessible to all South Africans by outcomes-based education (DoE, 1997a:14). The above suggests that all learners in South African schools have access to Natural Sciences as a result of OBE.

2.4.4.6 Technology

The Revised National Curriculum Statement (DoE, 2002:28) defines Technology as a human activity that involves developing solutions to people's needs by combining skills, values, knowledge and resources with sensitivity to social and environmental factors. The above implies that Technology aims at equipping learners with skills required by the economy of the country.

According to Curriculum 2005 (DoE, 1997a:15), the Technology learning area seeks to develop:

- an understanding of technological knowledge, skills and processes;
- an understanding of the impact of technology; and
- the capacity and the desire to be engaged in the technology process.

2.4.4.7 Arts and Culture

Arts and Culture are part of life, embracing the spiritual, material, intellectual and emotional aspects of human society (DoE, 1997a:15). The above is supported by the Revised National Curriculum Statement (DoE, 2002:24) that maintains that Arts and Culture as a learning area embrace the spiritual, material, intellectual and emotional aspects of different South African indigenous arts and culture practices. Arts and Culture aim at developing creative individuals and responsible citizens in line with the values of democracy enshrined in the constitution of the country South Africa (DoE, 2002:4). The above suggests that Arts and Culture aim at upholding the values of democracy in South Africa.

According to the Revised National Curriculum Statement (DoE, 2002:19), Arts and Culture attempts to address the imbalances that resulted in strengthening the influence of international cultures. Arts and Culture aim at making learners realize that, in a multicultural country, there is no culture which is superior to another.

2.4.4.8 Economic and Management Sciences

Mothata et al. (1998:34) regard this learning area as fundamental in preparing the citizens of South Africa to understand the critical importance of reconstruction and development and economic growth or a sustainable economic future. This may imply that Economic and Management Sciences cater for economic growth of the country. Curriculum 2005 (DoE, 1997a:16) complements the above by maintaining that through economic and management sciences learners are:

- equipped with the knowledge and comprehension of economic and management skills and competence; and
- introduced to an understanding of the wealth process.

2.4.4.9 Life Orientation

The Revised National Curriculum Statement (DoE, 2002:26) sees Life Orientation as preparing learners for life and its possibilities. The above is complemented by Curriculum 2005 (DoE, 1997a:16) which maintains that Life Orientation:

- enhances the practise of positive values, attitudes, behaviours and skills in the individual and the community;
- works for a transformation of society in the interest of promoting a human rights culture;
- promotes the achievement of individual learners' potentials by strengthening and integrating their self-concept; and
- encourages a healthy lifestyle.

2.4.5 Categorisation of subjects into learning fields in FET

2.4.5.1 Orientation

In FET in South African schools, according to the National Curriculum Statement (DoE, 2003: 5), subjects are categorised into Learning Fields. National curriculum statement (DoE, 2003: 6) sees a Learning Field as a category that serves as a home for cognate subjects, and that facilitates the formulation of rules of combination for further Education and Training. The following are Learning Fields according to the National Curriculum Statement (DoE, 2003: 6):

- Languages ;
- Arts and Culture;
- Business; Commerce, Management and Service Studies;
- Manufacturing, Engineering and Technology;
- Human and Social Sciences and Languages; and

- Physical, Mathematics and Mathematical Literacy, Computer, Life and Agricultural Sciences.

2.4.5.2 Languages

Curriculum transformation for High Schools in South Africa for the period between 2003 and 2008 (DoE, 2003) maintains that all eleven South African official languages have been categorised into this Learning Field.

2.4.5.3 Arts and Culture

The subjects that have been categorised into this learning field, according to Curriculum Transformation for High Schools in South Africa for the period between 2003 and 2008 (DoE, 2003), are Dance, Design, Music, Dramatic Arts and Visual Arts.

2.4.5.4 Business, Commerce, Management and Service Studies

According to Curriculum Transformation for High Schools in South Africa for the period between 2003 and 2008 (DoE, 2003), Accounting, Business Economics, Economics, Consumer Studies, Hospitality studies and Tourism are categorised into this Learning Field.

2.4.5.5 Manufacturing, Engineering and Technology

Curriculum Transformation for High Schools in South Africa for the period between 2003 and 2008 (DoE, 2003) maintains that Electrical Technology, Mechanical Technology and Engineering Graphics are categorised into this Learning Field.

2.4.5.6 Human and Social Sciences and Languages

Subjects that are categorised into this Learning Field, according to Curriculum Transformation for High Schools in South Africa for the period between 2003 and 2008 (DoE, 2003), are Geography, History and all South African official languages at second additional language level.

2.4.5.7 Mathematics and Physical, Computer, Life and Agricultural Sciences

According to Curriculum Transformation for High Schools in South Africa for the period between 2003 and 2008 (DoE, 2003), subjects that have been categorised into this Field are Physical Sciences, Information Technology, Computer Sciences, Mathematics, Mathematical Literacy, Life Sciences and Agricultural Sciences.

2.4.5.8 Requirements for National Senior Certificate

In order for a learner to obtain the National Senior Certificate he or she must offer the following learning components (DoE, 2005:6):

- Two official languages provided that one of the two official languages is offered on the home language level.
- Mathematics or mathematical literacy.
- Life orientation.
- A minimum of any three other subjects of which a maximum of two additional languages over and above the two official languages mentioned above may be offered.

From the discussion above it emerges that at least seven subjects are required in order to satisfy the conditions for FET (general) Certificate instead of the current six subjects for the Senior Certificate.

2.4.6 Clustering of learning areas

Clustering of learning areas in the GET Band in South African schools comes into being as a result of the outcomes-based curriculum. Mothata et al. (1998:38) see clustering of learning areas as entailing the reflection of the relatedness of knowledge, skills and values in the learning programmes as they exist in real life. The above suggest that clustering of learning areas in an outcomes-based curriculum takes the principle of integration into consideration. No learning area in the outcomes-based curriculum may be taught independently without considering other learning areas. Mothata et al. (1998:38) maintain that clustering of learning areas in an outcomes-based curriculum serves to:

- facilitate the design of integrated and effective learning programmes by the developers; and

- assist in designing relevant and effective experiential activity programmes in the classroom and also to enable teachers to report effectively on the progress made by the learners.

According to Mothata et al. (1998:38), clustering of learning areas may enable the learner to apply skills he or she has learned in real life. The above implies that clustering of learning areas relates what is done in the classroom situation to the real life outside the school yard. The process may enable the learner not to be alien in the country of his or her birth because the needs of industry and business are catered for by what is done in the classroom situation as a result of OBE.

2.4.7 The introduction of a learning programme in South African schools

Various definitions of the concept of a learning programme exist. Wilkens and Patel (1998:45) define a learning programme as the vehicle through which the curriculum is implemented. Kramer (1999:138) defines a learning programme as a set of activities that happen in the learning area. Olivier (1998:35) regards a learning programme as the outcomes-based way of organising learning content. The above suggest that the concept of a learning programme comes into South African schools as the results of an outcomes-based curriculum.

According to the Revised National Curriculum Statement for GET (DoE, 2002:5) and the National Curriculum Statement for FET (DoE, 2003), the design features of a learning programme are critical outcomes, learning outcomes and assessment standards. Teachers may need knowledge of the concepts as the majority, if not all, of them have been trained in the traditional way of teaching. The concepts will be dealt with in full in chapter 3.

Before the development and implementation of a learning programme in the classroom, an outcomes-based curriculum encourages teachers to know, amongst others, the level of development of each learner in the different learning programmes and learning areas (Wilkens & Patel, 1998: 44). The

above aims at encouraging teachers to develop a learning programme that suits their learner's specific needs.

According to Wilkens and Patel (1998:44), teachers in an outcomes-based curriculum need to know about and have access to the available resources in the classroom, schools and community to plan interesting activity-based learning experiences. That may help teachers to relate what is being taught in the classroom to the world outside the classroom.

2.4.8 Time allocation in senior phase and FET for learning programmes in South African schools

The Revised National Curriculum Statement (DoE, 2002:19) maintains that outcomes-based education encourages South African secondary schools to allocate time for learning programmes in the senior phase as follows:

Learning Programmes	Time %	Hours per week
Languages	25%	9.00
Mathematics	18%	6.25
Natural Sciences	13%	4.55
Social Sciences	12%	2.20
Technology	8%	2.75
Economics and Management Sciences	8%	2.75
Life Orientation	8%	2.75
Arts and Culture	8%	2.75

In Further Education and Training, according to National Curriculum Statement (2003:21), time allocation for learning programmes is as follows:

Subject	Credits	Time allocation (hours per week)
Language (1 (LOLT)	20	4,5
Language 2	20	4,5
Mathematics or mathematica literacy	20	5
Life orientation	10	2

Core subjects	40	4,5 x 2
Elective	20	4,5

In both time allocations more time is given to languages and mathematics than to other subjects, which suggests that languages and mathematics are given reference in the new curriculum. This implies that there might be a demand for teachers with competence in these subjects.

2.4.9 The need for new competence by teachers trained for conventional education

Nelson, Carlson and Polonsky (1996:358) see competence as including knowledge of the material being taught, of the learner in class, or professional skills in teaching and considered professional judgment. Taking the above into consideration, competence in South African schools may be called the ability to understand, perform and plan teaching activities in an outcomes-based way. In chapter 1 (*cf.* 1.2) it is stated that OBE brings new methods and ways of working into the classroom that change the setup of traditional teaching. Teachers trained in the traditional way of teaching may find it hard to teach in the classroom of OBE as a result of new methods and the way of working that make them unable to perform learned tasks both effectively and with understanding.

Sikhavhakhavha (1999:12) maintains that when innovations are made to the curriculum, new competence required by the new approach also comes into being. According to Sikhavhakhavha (1999:12), without the competence of the new approach, the curriculum in outcomes-based education could fail in its purpose.

2.4.10 Implications for secondary school teachers

It is stated above (*cf.* 2.4.1.) that outcomes-based education forms the foundation for the curriculum in South Africa. Secondary school teachers are the implementers of the new curriculum in secondary schools. Without the knowledge of the above-mentioned curriculum they may find it difficult to implement it in the classroom situation. According to Clark (1996:92), the

school curriculum is the heart of the learning process. The above also implies that without knowledge of the outcomes-based curriculum, teachers cannot be effective in their teaching in the classroom. Hopkins (1996:32) complements the above by saying that teachers need to find a way that enables them to enhance learner outcomes through specific changes in teaching.

In the subsection on the need for new competence by teachers trained for conventional education (*cf*, 2.4.9) it is stated that outcomes-based education brings new methods and ways of working to the classroom that change the setup of traditional teaching. This implies that secondary school teachers need to be equipped with new competences required by the new approach. The above is complemented by Sikhavhakhavha (1999:12) who maintains that any change in a curriculum should be accompanied by the provision of opportunities and support to teachers to acquire new competences.

In the same subsection above (*cf*, 2.4.9) it is stated that when innovations are effected in the curriculum, new competence required by the new approach also comes into being. This may be the case in secondary schools where an outcomes-based curriculum has been introduced in grades 8 and 9. The majority of teachers trained in the traditional way of teaching may need some assistance in order to cope with outcomes-based education.

In the subsection of merging of traditional school subjects into learning areas (*cf*, 2.4.4.1) it is also stated that some of the learning areas are new fields of study that had not been there during the time of conventional education. The new fields of study brought about by outcomes-based education are Technology, Arts and Culture and Life Orientation. It is suggested that teachers need to be assisted in these learning areas to handle them with competence.

According to Nelson *et al.* (1996:191), the purpose of schooling is to prepare leaders for their role in society. The purpose in South African secondary schools may not be reached if teachers are not provided with new competence required by outcomes-based education. Teachers may fail to

teach in an outcomes-based way or may remain clinging to traditional teaching.

2.5 SUMMARY

This chapter paid attention to outcomes-based education in South African schools. It was followed by the curriculum policy of education prior to 1994, general background to outcomes-based education and the application of outcomes-based education in South African schools.

In the next chapter of this study, attention will be given to didactic-professional needs of the secondary school teacher regarding outcomes-based education.

CHAPTER 3

DIDACTIC–PROFESSIONAL NEEDS REGARDING OUTCOMES-BASED EDUCATION OF SECONDARY SCHOOL TEACHERS

3.1 INTRODUCTION

This chapter aims at identifying areas of didactic-professional needs regarding outcomes-based education of secondary school teachers. It starts by giving a comparison between content-based education and outcomes-based education. The last part concentrates on a description of the didactic-professional needs of secondary school teachers regarding outcomes-based education that emanate from this comparison and it is followed by subsequent discussions.

3.2 COMPARISON BETWEEN CONTENT-BASED EDUCATION AND OUTCOMES-BASED EDUCATION

There are vast differences between traditional content-based education and transformational outcomes-based education. Olivier (1998:32), for example, states that in content-based education the learning process is content and time-driven and not learner and achievement-driven as in outcomes-based education. This implies that in content-based education teachers need to finish the prescribed subject matter within a specified period whether learners understand it or not. Teachers may need assistance to enable them to make the learning process to be learner and achievement-driven. In addition to the above, Waspe (1997:22) sees outcomes-based education as the education that allows learners to succeed at their own pace and in their own ways. The majority of secondary school teachers may need assistance to enable them to allow learners to succeed at their own pace and in their own ways as they have been trained in the traditional way of teaching. In content-based education there is a possibility of a learner failing each grade whereas in OBE

the possibility could be reduced because learners who have not mastered the learning content is given another time to master it whereas in content-based education the learning process is time driven.

Van der Vyver (1998:20) says that outcomes-based education enables teachers to define their job function in terms of what learners can achieve after being in their classroom for a year. Teachers may need to change from merely completing or covering the syllabus to being able to demonstrate the outcomes learners can achieve after being in their classroom for the year.

Content-based education makes the teacher the sole source of information as well as the role model with regard to the setting of norms and standards (Olivier, 1998:38). In chapter 1 it is stated that in outcomes-based education the teacher becomes the facilitator with the learner taking a more active role in the classroom events. The majority of teachers may need assistance to change from being sources of information as well as role models to facilitators of learning. Van der Vyver (1998:40) supports the above by saying that outcomes-based education requires teachers to:

- facilitate the knowledge acquisition of that which is otherwise inaccessible to learners;
- provide guidance to learners on how and where information can be obtained about knowledge, skills and processes which should be followed;
- demonstrate what needs to be demonstrated to learners, for example when learners are doing chemistry experiments, teachers need to demonstrate how the experiment is done;
- direct learners to capitalise on acquired knowledge in order to solve problems;
- intervene on a continuous basis with learners to confirm progress and direction of teaching and learning;

- mentor, assist, facilitate and guide learners in order to assist them to attain outcomes;
- reconcile diverse learning styles of learners with the context of learning in order to create conducive learning conditions for all;
- align the world of learning with the world of work to learners; and
- propagate creativity by means of:
 - self-learning;
 - self-development;
 - cross-curricular thinking; and
 - social interrelationship.

Van der Horst and McDonald (1997:13) see outcomes-based education as focusing on knowledge, skills and attitudes/values while content-based education as focusing on knowledge only. The focus of outcomes-based education is on being able to use and apply learned knowledge, skills and attitudes rather than on merely absorbing specific or prescribed bodies of content to be reproduced later, which is what is done in content-based education (Van der Horst & McDonald, 1997:13). The above suggest that teachers trained in a traditional way of teaching may need to improve their professional competence to be able to teach in an outcomes-based way.

According to Van der Vyver (1998:23), learners who have difficulty with the language of instruction in content-based education resort to rote learning to show that they know the subject matter of a particular subject. Outcomes-based education could be trying to avoid the above by not only focusing on knowledge but also on skills, attitudes and values that need to be attained by learners. Learners in OBE could learn the skills of reading, writing, listening and speaking the language of instruction to enable them to understand what they learn in their learning activity. The process of learning the skills of

reading, writing, listening and speaking the language of instruction could help learners to grasp the language of instruction.

In addition to the above, Waspe (1997:22) says that outcomes-based education enables the learners to think, to reflect and to do things and not just to memorise everything for exams and tests. It suggests that teachers trained for conventional education, who rely on only one or two textbooks, need to improve both their academic and professional competence to be able to implement outcomes-based education in the classroom.

Content-based education employs traditional tests and examination questions in the assessment of learners (Olivier, 1998:45). In outcomes-based education, according to Olivier (1998:45), self-assessment and peer group assessment become more important in order to achieve a well-balanced assessment of the following:

- Mastering of content on the following levels: comprehension, application, analysis, synthesis and evaluation;
- How learners collect, analyse, organise and critically evaluate information;
- The nature, extent and quality of the preparation which took place whilst planning to achieve or construct the outcomes; and
- How the learners understand that the world is a set of related systems.

In content-based education teachers are tempted to focus on the factual information in their subject (Van der Vyver, 1998:23). Van der Vyver further maintains that tests and examination in content-based education are ways to determine which learners are competent in the prescribed content. Provincial and national examinations in content-based education also play their part in keeping teachers focused on content (Van der Vyver, 1998: 23). Mahomed (1998:3) says that in outcomes-based education learners examine their work in the light of performance standards and shift their orientation from “what did I get” to “now I know what I need to improve”. The above imply that teachers

who have been trained for conventional education need to improve their professional competence to enable the shifting of learners' orientation as indicated.

According to Watkins (1997:164), in content-based education from the point of teachers and learners, a 40% pass means that 60% of the work in the test or examination was not known, understood or was misinterpreted. Watkins (1997:165) maintains that it is not made clear which 60% of the curriculum is not known by learners. In outcomes-based education learners are judged by what they demonstrate they can do, not what they cannot do (Watkins, 1997:164). The above is complemented by Van der Horst and McDonald (1997:14) who maintain that in outcomes-based education continuous assessment is used to provide information for further instructional decisions. Teachers may need to improve their professional competence to be able to switch from traditional assessment to continuous assessment.

Mahomed (1998:6) maintains that content-based education is not sufficiently keeping pace with the changes in patterns of work, socialization, identity formation and learning brought about by the technotronic revolution. Outcomes-based education aims at reducing current unemployment levels and meeting global participation (Mahomed, 1998:9). Mahomed is supported by Unterhalter (1999:26) who sees many of the policy documents on the new curriculum in South Africa as being articulated side by side with an economic vision, namely, the reconstruction and development plan. Teachers need to be assisted to keep sufficient pace with the changes in patterns of their work in the classroom.

In order for teachers trained for content-based education to teach the curriculum based on the principles of outcomes-based education, they need assistance. The above is complemented by the Ministerial Review Committee (2000) in its report which maintains that the success of an outcomes-based curriculum depends centrally on the quality of the teachers - their content knowledge, their familiarity with different teaching methods and their access to learning programmes and textbooks. This suggests that teachers need both academic and professional competence to be able to teach in an outcomes-

based way. The above implies that the following didactic-professional needs of secondary school teachers in the Venda region of the Limpopo Province need to be taken into consideration:

- The need to improve secondary school teachers' academic competence (*cf*, 3.3); and
- The need to improve secondary school teachers' professional competence (*cf*, 3.4).

3.3 THE NEED TO IMPROVE SECONDARY SCHOOL TEACHERS' ACADEMIC COMPETENCE

Farrel, Kerry and Kerry (1995:52) define competence as a measure by which a person can demonstrate that he or she is able to perform learned tasks both effectively and with understanding. Taking the definition into consideration, academic competence may be different from professional competence which will be defined in the section that follows. Academic competence may be defined as the measure by which teachers demonstrate command of the subject knowledge. Both underqualified teachers and better qualified teachers need to improve their academic competence in order to keep up to date with learning content that has been brought about by the outcomes-based curriculum (Sikhavhakhavha, 1999:9). The above suggests that secondary school teachers need assistance to improve their academic competence to be up to date with the outcomes-based curriculum introduced in South African schools.

According to Sikhavhakhavha (1999:12), when innovations are introduced to the curriculum, new learning content and teaching approaches also come into being. The above suggests that changes that came about as a result of the introduction of an outcomes-based curriculum require new academic competence brought about by the learning content and teaching approaches. For instance, teachers may be in need of knowledge of Technology, Life Orientation and Arts and Culture that are new areas of learning in grade 8 and 9.

It is no use to provide a new curriculum without first improving secondary school teachers' academic competence, for then the curriculum will serve no purpose. It is like equipping a hospital with good medicines and better technological equipment with only the nurse in charge.

Curriculum 2005 (DoE, 1997a:1) sees life-long learning as a strategy that could enable the transformation of the curriculum. The above suggests that in order for an outcomes-based curriculum to be effectively implemented, teachers need to be given a chance to also improve their academic competence.

Sikhavhakhavha (1999:9) sees secondary school teachers as being charged with the task of providing trained citizens for the Limpopo Province. Many learners who graduate from secondary school usually enter the adult world where they are supposed to serve their community without knowledge acquired from tertiary institutions. The Limpopo Province needs a body of teachers who is academically competent in their learning areas.

Steyn (1999: 206) sees to focus attention and energies on the improvement of teachers as important in order to improve teaching and learning activities. The above implies that, in order for teachers to teach in an outcomes-based way, they need academic competence. Academic competence together with professional competence, still to be discussed, may enable teachers to teach in an outcomes-based way.

According to Sikhavhakhavha (1999:10), a good command of the learning content by the teacher may increase the involvement of learners in learning and also reduce the tension that may arise as a result of a lack of command of the learning content. The above also supports the notion of the improvement of academic competence.

The teacher's command of the learning content coupled with his professional competence (see 3.4) could determine the degree to which learners' attention is drawn to the learning activity. The above statement could suggest that academic competence and professional competence complement each other in the teaching-learning activity. Teachers need to show a command of

learning content when asked questions by learners. This may improve their authority in the classroom.

3.4 THE NEED TO IMPROVE SECONDARY SCHOOL TEACHERS' PROFESSIONAL COMPETENCE

3.4.1 Orientation

Sikhavhakhavha (1999:15) defines professional competence as a combination of knowledge and skills, the possession of which enables the teacher to arrange and teach the learning content and create a learning environment in a way that is accessible to learners. The above suggests that professional competence in an outcomes-based curriculum enables the teacher to teach in an outcomes-based way. For the purpose of this study, this section could be divided, based on the information of chapter 2 and the comparison between content-based education and outcomes-based education above, into:

- The need to know new terminology to come to grips with an outcomes-based curriculum;
- The need for teachers to change from being transmitters of knowledge to facilitators of learning;
- The need to know new ways of learning according to an outcomes-based curriculum;
- The need for secondary school teachers to integrate educational activities across all eight learning areas in grades 8 and 9 and to promote conceptual progression in each learning area;
- The need to know teaching strategies that are relevant to an outcomes-based curriculum; and
- The need to implement new ways of assessment.

3.4.2 The need to adapt to new terminology

3.4.2.1 Orientation

Even though one of the recommendations of the Ministerial Review Committee was to simplify the terminology (*cf*, 2.4.1), the outcomes-based curriculum comes into the classroom with new terminology that needs to be understood by teachers in order for them to be able to effectively implement it. The above is supported by Potenza (1999:12) who states that the new terminology of an outcomes-based curriculum makes it hard for any teacher to come to grips with it and to begin to implement this new curriculum in their classroom. The following are concepts which teachers may not be familiar with:

- Critical and developmental outcomes;
- Learning outcomes;
- Learning programmes; and
- Assessment standards.

The above are dealt with in the next subheadings.

3.4.2.2 Critical and developmental outcomes

The Revised National Curriculum Statement (DoE, 2002:11) defines critical and developmental outcomes as a list of outcomes that is derived from the constitution of South Africa. Potenza (1999:12) sees critical and developmental outcomes as outcomes that have been designed to make learners responsible, thinking citizens who can make a meaningful contribution to their society. Critical and developmental outcomes have been dealt with in chapter 2 (*cf*, 2.3.1). It is expected that teachers have to be competent in linking critical and developmental outcomes with the learning outcomes that have to be attained in their classes.

3.4.2.3 Learning outcomes

The Revised National Curriculum Statement (DoE, 2002:14) regards learning outcomes as descriptions of what knowledge, information, skills, attitudes and values learners need to know and must be able to execute at the end of a grade or more. The above have been discussed as the desired end results of each learning programme in chapter 2 (*cf*, 2.3.2). Learning outcomes are derived from critical and developmental outcomes (DoE, 2002:14). Teachers trained in the traditional way of teaching where they are made to cover a list of topics in their teaching may need assistance to enable them to show what learners can do when they reach a certain stage.

3.4.2.4 Learning programmes

Learning programmes have already been dealt with in chapter two (*cf*, 2.4.7). Secondary school teachers trained in the traditional way of teaching, may need knowledge and skills of constructing learning programmes to be in line with an outcomes-based way of teaching.

3.4.2.5 Assessment standards

Assessment Standards describe the level at which learners need to demonstrate achievement of the learning outcomes and ways of demonstrating achievement (DoE, 2002:14). According to the Revised National Curriculum Statement (DoE, 2002:14), assessment standards include content, skills and values required to achieve learning outcomes. Teachers may need knowledge of assessment standards to be able to teach with success in the classroom, as the Revised National Curriculum Statement (DoE, 2002:14) sees assessment standards as contributing towards qualifications.

3.4.3 The need for teachers to change their role in class

Henning, Gravett and Daniel (1998:196) see the activities of teachers as facilitators as including the following:

- Checking learners' progress and asking them questions;

- Responding to learners' questions; and
- Asking learners to invoke an earlier learning experience that relates to the present problem.

Teachers trained in the traditional way of teaching may find it hard to fit in their new role if they are not assisted in some way or other. The traditional way of teaching makes teachers together with text books, sources of knowledge, and learners are made passive recipients of predetermined content (*cf*, 2.3.1). Because of the above, an outcomes-based curriculum may suppress acquired traditional competence of teachers and may demand the development of new competence (*cf*, 3.4.1). The more complex the reform in the curriculum, the greater the problem of teachers not being able to implement the curriculum in the classroom (Fullan, 1996:70).

An outcomes-based curriculum may shift teachers from an expository teacher-centred to a participatory, learner-centred approach which, according to Kraak (1999:93), may more or less imply that learners learn the learning content at their own pace. The work of teachers in this case is to find methods and connections that assist individual learners, especially during corrective loops (Kraak, 1999:93). In order for teachers to be able to find methods and connections that assist individual learners, they need assistance and training to improve their competence to be able to facilitate in the classroom.

3.4.4 The need to implement appropriate ways of learning

3.4.4.1 Orientation

The Media in Education Trust (1997) maintains that in an outcomes-based curriculum the following are ways of learning:

- Learning through doing things;
- Learning through discovery;
- Learning through communication with others; and
- Learning when learners are not afraid of failing.

All these are discussed in the subsections that follow.

3.4.4.2 Learning through doing things

According to Olivier (1998:3), in an outcomes-based curriculum the learning process is learner-driven and is also aimed at achieving outcomes. The above implies that an outcomes-based curriculum gives learners an active role in doing things in the classroom. For example, through cooperative learning learners could be actively involved in the act of learning selected learning content to realise a certain outcome. Teachers trained in the traditional way of teaching may need assistance to enable learners to take an active role in doing things in the classroom. The change to an outcomes-based way of teaching compels teachers to adjust to new methods and conditions of teaching (Mahomed, 1998:4).

3.4.4.3 Learning through discovery

Van der Horst and McDonald (1997:13) maintain that in an outcomes-based curriculum learners need to be facilitated towards the achievement of the outcomes by teachers who act as facilitators rather than as mere presenters or conveyers of knowledge. Teachers in an outcomes-based curriculum could be sources of information and role models when demonstrating what needs to be demonstrated. The above suggests that learners need to learn through discovery with appropriate help from teachers. For the teachers trained in the traditional way of teaching, of being mere presenters or conveyers of knowledge, to act as facilitators may be difficult without assistance. Learners in an outcomes-based curriculum need to work to be more independent in their learning and thinking (Van der Horst & McDonald, 1997:14). The above may not be achieved if teachers trained in the traditional way are not assisted to enable them to allow learning through discovery in the classroom.

3.4.4.4 Learning through communication with others

Mahomed (1998:7) stresses that in an outcomes-based curriculum learners need to collaborate rather than to compete. The above implies that learners need to work together as a team, as well as to remove themselves from competition for position in the classroom. In an outcomes-based curriculum

learners in their learning act need to work with each others in a team or group (Olivier, 1998:46). In order for the secondary school teachers to be able to make learners learn through communicating with each other, they may need some assistance.

3.4.4.5 Learning when learners are not afraid of failing

Van der Horst and McDonald (1997:14) are of the opinion that each learner in an outcomes-based curriculum is provided with the necessary time and assistance to fulfil his or her potential. The above may remove fear of failing from the learner because if he or she has not achieved the required standard, another opportunity is granted within limits for him or her to do so. Secondary school teachers, trained in the traditional way of teaching, which, according to Claassen (1998:36), requires teachers to pass knowledge to the learners in a one-directional way, may need to understand the above.

3.4.5 The need for secondary school teachers to integrate educational activities and to promote conceptual progression

An outcomes-based curriculum enables teachers to also look at the information outside their learning areas when preparing for educational activities. This is supported by the Senior Phase Policy Document (DoE, 1997c:31) which maintains that an outcomes-based curriculum enables teachers in all educational activities to integrate all eight learning areas in grades 8 and 9 in secondary schools. It implies that an educational activity in any learning area may involve other learning areas. No educational activity in a learning area could be taught effectively without involving other learning areas in an outcomes-based curriculum. The process of integration may also take place in grade 10 to grade 12 subjects. Teachers trained in the traditional way may somehow need assistance to include content from other learning areas and subjects when planning educational activities.

The Revised National Curriculum Statement (DoE, 2002:14) maintains that each learning area in an outcomes-based curriculum demonstrates how conceptual progression is to occur through the assessment standards. The same could be the case with the learning fields in FET. Secondary school

teachers trained in the traditional way need knowledge of the above to be able to promote conceptual progression in each learning area and subjects in grades 10 to 12. In addition, the Revised National Curriculum Statement (DoE, 2002:14) maintains that assessment standards specify more complex, deeper and broader content, skills, values and understanding to be achieved in each grade as well as from grade to grade.

3.4.6 The need to implement relevant teaching strategies

3.4.6.1 Orientation

Kramer (1999:91) defines teaching strategies as strategies that decide the approach that the teacher will take in managing learning activities. For the purpose of this study the following teaching strategies according to Kramer (1999:89) and Montada (1994:4720) which are relevant to an outcomes-based curriculum will be discussed, i.e. direct instruction, indirect instruction, independent learning, cooperative learning, reception, discovery learning and problem solving strategies.

3.4.6.2 Direct instruction

Direct instruction is teacher-centred (Meister ; 1994:1525). The teacher provides all the knowledge and also directs what and how learning happens (Kramer, 1999:92). It suggests that the teacher in direct instruction is in full control of the classroom and may also determine the pace, style and the atmosphere of the learning environment.

Direct instruction is useful for the presentation of information, facts, concepts and new ideas (Kramer, 1999:93). The strategy is characterised by relatively short instructional periods followed by practice until mastery of learning is achieved (Gunter, Estes & Schwab, 2003:63). Teachers in an outcomes-based curriculum may use direct instruction when teaching knowledge which is inaccessible, or when introducing what needs to be demonstrated to the learners for example, when they are conducting an experiment. The above may imply that direct instruction may be useful if it is used with other teaching strategies. Teachers may need assistance or training in one way or another

for them to be able to use direct instruction in conjunction with other strategies.

3.4.6.3 Indirect instruction

Indirect instruction is learner-centred with a very high degree of learner involvement (Kramer, 1999:94). This implies that indirect instruction shifts the teacher away from being the sole source of information to facilitate in the classroom. "Indirect teaching methods involve learners in discussing, exploring, investigating, experimenting, deciding and expressing personal concepts" (Kramer, 1999:94). Teachers trained in the traditional way which makes them sources of information, may also need assistance to accommodate indirect instruction in their teaching activities.

The major characteristics of an indirect teaching strategy are that the learners create their own understanding of concepts by analysing the evidence gathered through their learning activities (Kramer, 1999:94). Indirect instruction may encourage creative thinking on the part of the learners. Teachers may only provide assistance in cases where learners are having some difficulties in their act of learning. In addition to the above, indirect instruction allows for individual styles and a variety of ways to approach learning (Kramer, 1999:94).

Indirect instruction makes learners rely on enquiry when seeking to create understanding (Kramer, 1999:94). The teacher's role could be to provide guidance on how and where information can be obtained on knowledge, skills and processes which should be followed (*cf*, 3.2).

The disadvantages of indirect instruction may be that it is time-consuming in planning and using, unpredictable in outcomes and challenging to teachers who are uncomfortable and without full control of the classroom. The above suggest that the teacher's control of the classroom is reduced through indirect instruction. Hence, teachers trained in the traditional way may find it hard to give learners the chance to explore. The majority of, if not all, secondary school teachers in the Limpopo Province may need some assistance as they have been trained before the introduction of an outcomes-based curriculum.

3.4.6.4 Independent learning strategy

Kramer (1999:96) regards an independent learning strategy as the strategy that a learner is involved in when the learner undertakes a learning task by himself or herself. The ability of learners to learn independently is an important element in their development (Beresford, 2003:24). According to Kramer (1999:96), the benefit of this is that the learner relies on his or her own efforts and has a high probability of mastering essential aspects of what has been learned. Teachers trained in the traditional ways of teaching may need assistance in integrating an independent learning strategy with other learning strategies.

According to Kramer (1999:96), the advantage of an independent learning strategy is that it helps to pinpoint areas of weakness that learners may have and in which the teacher may give assistance to them. Kramer (1999:96) also maintains that slower learners may be allowed more time to complete tasks and faster learners may be allowed to move on to new tasks without having to set the same limit for the whole class. The above suggest that learners in an OBE classroom can perform different learning activities as a result of the difference in learning pace they have.

3.4.6.5 Cooperative learning strategy

Slavin (1996:200) defines the cooperative learning strategy as the strategy in which learners work in small groups to help one another master academic content. The co-operative learning strategy emphasizes the use of a team goal and team success that can only be achieved if all members of the team learn the objectives being taught (Slavin, 1996:201). This is complemented by Kramer (1999:97) who maintains that cooperative learning provides for learners to work together and to help each other to achieve the outcomes of the learning task. The above imply that the teacher's role is changed from that of being the source of knowledge to the facilitator of the learning process. Through cooperative learning learners may no longer be recipients of the teacher's superior knowledge and insight but may be involved in and be accountable for their learning.

Gelderblom and De Kock (1995:59) maintain that the cooperative learning strategy is based on the following principles:

- Positive interdependence of the group members;
- Individual accountability;
- Face to face promotive interaction of group members; and
- Interpersonal and small group skills.

Sikhavhakhavha (1999:26) sees the advantage of cooperative learning as relating what is happening in the classroom to the outside world. The disadvantage of cooperative learning is that learners who do not want to share their ideas with others may find it hard to co-operate with others (Sikhavhakhavha, 1999:27). According to Gawe (1998:21), this problem may be overcome if the teacher monitors the progress of both individuals and that of the group as a whole.

3.4.6.6 Reception strategy

According to Kramer (1999:101), in outcomes-based education the reception strategy enables learners to rote learn the content such as formulae in order to use them to solve simple problems. It implies that in outcomes-based education the reception strategy can enable learners to memorise formulae of natural science and mathematics for future use. Reception strategy may be useful in the teaching-learning activity if it is used with others teaching strategies. Kramer (1999:101) complements the above by seeing memorisation as an important element of learning only when memorised knowledge is recalled for a useful purpose such as problem solving.

3.4.6.7 Discovery learning strategy

Discovery learning takes place in the form of guided discovery and independent discovery (Kramer, 1999:101).

- Guided discovery

Guided discovery is the discovery in which the teacher helps learners to discover the learning content (Kramer, 1999:101). The above suggests that in guided discovery the teacher plays the role of facilitator in the learning act.

- **Independent discovery**

In independent discovery the learners are left to themselves to research, experiment or in some way discover the facts or principles or skills that have been set as learning outcomes (Kramer, 1999:101). Teachers trained in the traditional way of teaching may need knowledge and skill to implement this in their teaching.

3.4.6.8 Problem-solving strategy

Montada (1994: 4719) sees problem-solving strategy as the strategy of finding or constructing a solution to a task for which no ready solution is on hand. Teachers trained in the traditional way of teaching which makes them sources of knowledge and learners passive recipients of knowledge from teachers, may need knowledge of applying the problem-solving strategy in their teaching in order to be up to date with outcomes-based education.

Opwis and Spada (1994:4722) sees the aim of the problem-solving strategy as helping learners to become more effective problem solvers, that is, people who can generate useful and original solutions when they are confronted with problems they have never seen before. Sikhavhakhavha (1999:27) sees a problem solving strategy as aiming at preparing the learners for the adult world where they can serve their community to the best of their abilities.

3.4.7 The need to implement new ways of assessment

3.4.7.1 Orientation

Outcomes-based education brought new strategies of assessment to the classroom that need to be known in one way or another by secondary school teachers. Teachers in OBE need to change from the traditional way of assessment of merely ranking learners from the highest to the lowest achievers to one which assesses and reports on what learners actually understand, know and can do (DoE, 1997b:28).

In addition to the above, Lubisi *et al.* (1998:13) see outcomes-based education as encouraging teachers to make the learning outcomes of their learning areas explicit to learners so that learners can assess themselves. It implies that apart from teachers' assessment, learners can assess themselves either as a group or individually. In order for the teachers to make the learning outcomes of their learning areas explicit to learners, they somehow need assistance as they have been trained in the traditional way of teaching.

Waspe (1997:23) sees the most important thing about assessment in an outcomes-based curriculum as that it does not happen only in the form of tests and examination, but that learners are being assessed differently on a regular basis throughout the year. This is supported by Schultze (1998:64) who maintains that assessment of learners in outcomes-based education is an ongoing and diverse process.

Lubisi *et al.* (1998:17) are of the opinion that tests are particularly good at assessing learners' ability to recall information. They also maintain that it is difficult to assess practical skills, attitudes and values in written classroom tests. This is supported by Taylor (1999:36) who maintains that in an outcomes-based curriculum learners' progress towards achieving various outcomes is assessed continuously, using the usual tests and exams methods as well as observations, conferencing, interviewing and even peer assessment. In the words of Malcolm (1999:83): "Outcomes-based education argues for assessment of many dimensions of performance, often complex in themselves and for reporting them separately". Teachers trained in the traditional way of teaching may need knowledge of implementing these in their assessment of learners.

Lubisi *et al.* (1998:18) see the aim of assessment in outcomes-based education as enabling learners to get feedback about exactly where they are strong or weak. The above implies that assessment in outcomes-based education is, amongst others, both formative and summative. The National Curriculum Statement for FET (DoE. 2003: 38) sees formative assessment as any form of assessment that is used to give feedback to the learner and

summative assessment as an assessment which is used to record a judgement of the competence or performance of the learner.

Lubisi *et al.* (1998:18) maintain that teachers in outcomes-based education need to know the reason why they are assessing. They must decide on what knowledge, skills and values they want to assess before they decide how they will assess (Lubisi *et al.*, 1998:18). The above suggests that in OBE assessment is directed by the outcomes. Teachers trained in the traditional way of teaching may need knowledge and skill of assessing in an outcomes-based way when implementing an outcomes-based curriculum.

According to Lubisi *et al.* (1998:20), outcomes-based assessment sums up a learner's competence by recording which outcomes the learner has achieved rather than allocating a mark to the learner. In order for the teachers trained in the old way of teaching to be able to use this kind of assessment, they need some assistance.

Outcomes-based assessment strategies are designed to ensure equal opportunity for success regardless of the learners' age, gender, physical or other disabilities, culture, background, language, socio-economic status or geographic location (DoE, 1997b:30). Teachers trained in the traditional way of teaching need to be helped for them to be able to give equal opportunity for success to all learners when assessing their performance and achievement in the classroom.

The following are examples of good classroom assessment strategies in OBE classrooms (DoE, 1997b:33):

- Portfolio assessment;
- Performance assessment;
- Peer and self-assessment;
- Observation sheets;
- Journals; and

- Teacher-made tests.

All of the above are discussed in the subsections that follow.

3.4.7.2 Portfolio assessment

A portfolio is seen as a deliberate, strategic and specific collection of a learner's work or evidence of a learner's work that demonstrates that learning has occurred (DoE, 1997b:33). Teachers trained in the traditional way may need knowledge of using this type of assessment as it is new to them.

3.4.7.3 Performance assessment

Performance assessment is a direct and systematic observation of an actual learner's actual performance or an examination of products created (DoE, 1997b:33). Performance assessment has the following characteristics (DoE, 1997b:34):

- It asks learners to perform, produce, create or do something;
- It is representative of the performance displayed by an individual in society or in the work place;
- It taps higher order thinking processes and problem solving skills;
- It is scored by people with the use of assessment criteria as the basis for human judgement;
- It provides an opportunity for learners to present and explain their work; and
- It involves learners in their own self-assessment.

Teachers trained in the traditional way of teaching need assistance in developing a performance assessment.

3.4.7.4 Peer and self-assessment

Peer and self-assessment are valuable strategies that can be employed together with performance assessment (DoE, 1997b:35). Lubisi *et al.*

(1998:29) maintain that peer and self-assessment may move learners away from being only interested in their marks to being interested in why they have done well or badly. Peer and self-assessment place learners in a powerful position to contend judgements made by teachers as a result of an assessment (Lubisi *et al.*, 1998:29). Teachers may need knowledge of employing these assessment strategies to the best advantage of learners.

3.4.7.5 Observation sheets

Observation sheets are used by teachers to record the achievement of specific skills, behaviours and evidence of achievement and progress over a learning period (DoE, 1997b:35). In order for secondary school teachers to cope with these criteria, they may need assistance.

3.4.7.6 Journal

According to Outcomes-based Education in South Africa (DoE, 1997b:35), in journals teachers ask learners to reflect on their learning and to clarify the meaning following a teaching episode. Outcomes-Based Education in South Africa (DoE, 1997b:35) sees a journal as most effective when learners are engaged in the learning process and have a clear understanding of the intended learning outcomes and how they will be assessed. In the Venda region of Limpopo Province where the majority of secondary school teachers have been trained in the traditional way of teaching, knowledge of using journals in the assessment may be needed.

3.4.7.7 Teacher-made tests

Outcomes-Based Education in South Africa (DoE, 1997b:35) sees tests as an integral part of the teaching and learning process when they are linked to the learning programme outcomes and flow from the lesson as a normal classroom activity. The above suggests that teachers may not use tests only in their assessment without considering other strategies.

3.5 SUMMARY

This chapter gave a comparison between content-based education and outcomes-based education. Thereafter an attempt was made to identify the needs of secondary school teachers regarding outcomes-based education.

The next chapter will look at the role of distance education in satisfying the didactic professional needs of secondary school teachers regarding outcomes-based education.

CHAPTER 4

THE ROLE OF DISTANCE EDUCATION IN SATISFYING TEACHERS' DIDACTIC-PROFESSIONAL NEEDS

4.1 INTRODUCTION

This chapter aims at analyzing the potential role of distance education in satisfying teachers' didactic-professional needs related to outcomes-based education. The chapter starts by giving some general aspects of distance education. This is followed by analyses of print as a delivery mode of distance education, the role of student counselling in distance education, the role of tutors in distance education, and distance education as a way to satisfy secondary school teachers' didactic-professional needs.

4.2 SOME GENERAL ASPECTS OF DISTANCE EDUCATION

4.2.1 Orientation

For the purpose of this study this section is divided into:

- What is distance education?
- Who are the people involved in distance education?
- Advantages of distance education, and
- Disadvantages of distance education.

4.2.2 What is distance education?

Various definitions of distance education exist. Waghid (1997b:26), for example, defines distance education as that type of education that occurs while educator and learner are at a distance from each other. Keegan (in De Wolf, 1994:1557) defines distance education as "correspondence education", "home study", "distance teaching", and "open learning". Moore (1994:1563),

on the other hand, defines distance education as a programme of study in which the dominant characteristic of the relationship between instructor and student is their geographic separation. Distance education can also be defined as any form of organized educational experience in which teaching and learning takes place with the teachers at a distance from the learner for most of the time (Dodds, in Orivel, 1994:1568). The concept of the separation between learners and educators which appears in all the definitions is that which makes it distinct from other forms of education (Waghid, 1997b:26). In addition, Waghid (1997b:26) maintains that in distance education students benefit from the planning, guidance and tuition of a tutorial organisation. This suggests that secondary school teachers may also benefit from distance education, particularly with regard to outcomes-based education if they are involved in it.

The positivists, according to Waghid (1997b:30), see the role of distance education as assisting students to learn about the real world. Learners are given facts and are expected to replicate their content and structure in their thinking (Waghid, 1997b: 30). The point of giving learners facts in distance education and expecting them to replicate their content and structure in their thinking should be refuted. According to the constructivists, learners in distance education do not passively receive information but instead actively construct knowledge as they strive to make sense of their worlds (Cobb, 1994:104). The above is supported by Waghid (1997b: 30) who sees knowledge as being based upon individual construction.

4.2.3 Who are the people involved in distance education?

Cilliers, Kirschmer and Basson (1997:17) see the majority, if not all students in distance education, as adults. Most of these students in distance education bring considerable experience of working life to academic courses and this has an effect on the ways in which they study, in particular when the studies and professional experience cover the same field. Teachers may benefit a lot if what they are studying is relevant to what they are doing.

According to Orivel (1996:843), distance education can respond to the learning needs of working adults unable to attend day school, handicapped or

chronically sick people, or mothers raising children. The above implies that secondary school teachers' didactic-professional needs related to outcomes-based education could be addressed by distance education. In addition, Cilliers *et al.* (1997:117) view the conditions of the adult learners as implying maturity, self determination, intentionality and a broad societal frame of reference. Students in distance education may be able to learn on their own as they are mature and self-determined.

4.2.4 Advantages of distance education

Moore and Kearsley (1997:166) see distance education as having become a major form of learning and teaching around the world. This implies that more and more people around the world are improving their competence through distance education. Even secondary school teachers may improve their academic and professional competence through distance education. In addition, Orivel (1996:843) states that distance education is growing more rapidly than conventional education.

Distance education opens up educational opportunities for students as does conventional education (Waghid, 1997a:112). Workers, like fulltime students, could learn skills and knowledge required in the working areas through distance education. Teachers trained in the traditional way of teaching in particular may be acquainted with outcomes-based education introduced in South African schools through distance education. Practicing teachers are given the opportunity to be schooled in OBE techniques in a practical manner since the learning material can be compiled in an OBE format (Wallace, 1998:13).

According to Cilliers *et al.* (1997:115), distance education is less expensive than full-time study at residential tertiary institutions. Many adult students, particularly secondary school teachers, may therefore afford the fees of distance education. Hence its accessibility to learners is high compared to conventional education.

Students in distance education are not restricted to living in any geographical area (Cilliers *et al.*, 1997:116). According to Sedibe (1998:93), distance

education moves education to the people. Instead of students moving to the institutions of education for their education, they receive education at their place of work or where they reside. The above suggest that family life is not disturbed by distance education and the decision to learn or complete a learning task lies with students during their spare time at home or in their working area. Teachers enrolled in distance education may study and complete their task at their respective homes or community library. Distance education has the ability to reach individuals at school in remote regions where contact with education departments is often limited in terms of instructional upgrading (Wallace, 1998: 13).

Waghid (1997b: 26) maintains that in distance education it is possible to teach great numbers of students at the same time wherever they live. Students may write assignments at the same time in their respective homes being controlled by time of submission.

4.2.5 Disadvantages of distance education

Distance learners are characterised by loneliness and a feeling of isolation which, according to Celliers *et al.* (1997:117), occur when the learners are confronted for the first time with a strange set of learning material and a teacherless study environment. In addition, Celliers *et al.* (1997:118) see the integration of study with family life as another problem faced by distance learners. Institutions practising distance education may need to address these problems to help students to study effectively. Students could be assisted during a student counselling period or during a period of tutorial lessons to overcome these problems.

4.3 PRINT AS A DELIVERY MODE OF DISTANCE EDUCATION

In chapter 1 it was stated that this study concentrates on distance education based on print. This form has been chosen above others because of the following points put forward by De Wolf (1994:1561):

- The instructive value of radio and television programmes is questioned in developed countries, which raises serious concern about its

feasibility in developing countries particularly in rural areas like the Venda region; and

- Few distance learners in the Venda region have functional access to computers, particularly to Internet.

Distance education based on print relies on carefully prepared innovative interactive study guides (Wallace, 1998:13). Students in distance education may use these study guides together with prescribed text books from a library for their assignments and examinations (Du Preez, 1998:64).

Basson and Nonyongo (1997:99) regard geographical separation between lecturers and students as most pronounced in distance teaching arrangements where provider and clients are at greater distance than in conventional teaching. Lecturers and students with print as a delivery mode of distances education are only connected by study guides, prescribed text books and tutorial or study letters.

Lecturers in distance education based on print direct their energy primarily at material writing and publication of learning content and the efficient distribution of these materials to distance learners (Basson & Nonyongo, 1997:199; Evans & Nation, 1996:168). The above suggests that lecturers in this form of distance education are primarily concerned with the writing of study guides, publication and distribution of them to distance learners. In addition, Mackintosh (1999:61) maintains that in print as a form of distance education there is strict division of labour between the categories of design, development and delivery of distance education teaching. The person who writes the material is not necessarily the same person who assesses the learning progress (Mackintosh, 1999:61).

According to Hall and Marret (1996:86), prepared teaching material is delivered to distance learners in their home or work place by post. The post office could be the only vehicle through which study guides and tutorial letters are sent to distance learners.

In chapter 1 (*cf.* 1.2) it was also stated that learning material is compiled in such a way that students can learn from them satisfactorily with little or no help from their instructors. Study guides are written in such a way that the distance learners can learn from them and from prescribed text book satisfactorily, alone or with little help from instructors.

4.4 THE ROLE OF STUDENT COUNSELLING IN DISTANCE EDUCATION

4.4.1 Orientation

Sedibe (1998:112) regards distance education as having two important “endogenous factors” internal to its practice. One of these endogenous factors is student support or student counselling (Sedibe, 1998: 112). The other, which is tutoring, will be dealt with in the section that follows.

Student counselling in distance education may play a significant role in improving the learning activity of distance learners. Van der Merwe (1997:57) defines student counselling as the process that is directed to helping students overcome the difficulty of adjusting to the distance education learning environment. Counsellors may provide support to distance learners in study centres or at the institutions providing the distance education.

For the purpose of this study, this section is divided into the following subheading:

- Requirements for successful counselling;
- The areas that academic counselling activities need to focus on; and
- Types of students counselling.

4.4.2 Requirements for successful counselling

Distance learners need to be given enough support in the form of counselling. According to the South African Institution for Distance Education (SAIDE)

(1995:64), in order for counselling to succeed, distance education institutions need to spend a large part of their annual budget on counselling.

Van der Merwe (1997:57) maintains that counselling needs to focus on the development of student learning skills. Distance learners may be able to learn effectively on their own in their respective homes or working places if a large part of the institutions' annual budget is spent on counselling.

Counselling needs to be mainly for student development and personal growth (Van der Merwe, 1997:58). In section 4.2 it is stated that distance learners are beset by loneliness and a feeling of isolation which occur when the learners are confronted for the first time with a strange set of learning material and a teacherless study environment. Student counselling in distance education may enable distance learners not to feel isolated when they are confronted for the first time with a strange set of learning material and a teacherless study environment.

4.4.3 The areas that academic counselling activities need to focus on

Van der Merwe (1997:60) regards the following areas as the areas that academic counselling activities in South Africa need to focus on:

- Study orientation and induction. SAIDE (1995:64) regards these as mainly concerned with informing distance learners about the particular tertiary institution's expectations, rules, regulations and students rights and privileges;
- Study learning management. Distance learners may be assisted in planning and managing their study time;
- Analysis of study problems including exploring reasons for examination failure and strategies for success when repeating a course. SAIDE (1995:64) sees the above as being concerned with coping with stress;
- Reading skills. Here learners are advised about how to improve their reading skills (SAIDE, 1995:64);

- Answering multiple choice questions, other types of questions and assignments; and
- Examination success. Preparation, writing, technique and controlling anxiety. The above may enable distance learners to effectively prepare for examination.

Distance learners may be encouraged to involve themselves in an effective learning process if counselling in academic activities in different institutions of distance education focus on the above areas.

4.4.4 Types of student counselling

4.4.4.1 Orientation

Van der Merwe (1997:60) divides student counselling in distance education into:

- Pre-course counselling;
- In-course counselling; and
- Post-course counselling.

4.4.4.2 Pre-course counselling

Pre-course counselling identifies the most appropriate course for a potential student (Van der Merwe, 1997:60). Distance learners in pre-course counselling may be assisted in the choice of the field of study that they can follow in that particular institution of distance education. The number of drop-outs may be reduced by pre-course counselling because distance learners could be assisted to follow the field of study based on their abilities and interests.

4.4.4.3 In-course counselling

In-course counselling could be given to students who are already busy with distance education. Van der Merwe (1997:60) regards in-course counselling as paying attention to problems in adult learning and motivation. Students, in particular teachers, may be assisted to cope with study pressure, examination

preparation and examination anxiety. In-course counseling, through its process of tackling problems in adult learning and motivation process, may enable distance learners to cope with the demands of distance learning.

4.4.4.4 *Post-course counselling*

Post-course counselling has to do with, amongst others, vocational guidance and a possible delay in achieving goals (Van der Merwe, 1997:60). Distance learners who fail at the end of the year may be encouraged to repeat what they were doing. Teachers who fail their examination at the end of the year, just like other distance learners, may be encouraged to repeat the course or courses.

4.5 THE ROLE OF TUTORING IN DISTANCE EDUCATION

4.5.1 Orientation

This section is divided into:

- Requirements for effective tutoring;
- Advantages of tutoring in distance education; and
- Disadvantages of tutoring in distance education.

4.5.2 Requirements for effective tutoring

Tutoring needs to be a role for experts in the learning material that learners are learning (Rowntree, 2000:80). These experts may be people from the institutions offering distance education or from NGO's. Tutors from institutions offering distance education may not necessarily be the designers of the learning material. In section 4.3 it is stated that there are strict divisions of labour between categories of design, development and delivery of distance education teaching. An example of a NGO offering tutoring in distance education is SACHED'S DUSSPRO which offers tutoring to students who have enrolled with UNISA, an institution of distance higher education in South Africa. Tutoring may take place at regional centres of the particular institution offering distance education or at the institution itself.

According to Rowntree (2000:80), effective tutoring needs to take the following forms:

- Regular face-to-face tutoring which is usually done in groups. In this form of tutoring general problems encountered by distance learners when studying the learning content and when writing assignments may be addressed by tutors; and
- Occasional one on one sessions with a tutor. Tutors in this form may address problems of each and every distance learner regarding learning content and assignments.

4.5.3 Advantages of tutoring in distance education

Tutors in distance education may assist distance learners a great deal in their act of learning. Secondary school teachers, just like any other distance learners, may benefit from the tutors' activities. The above is supported by Basson and Nonyongo (1997:100) who regard access to competent tutors by students in distance education as assisting them with difficult sections of their studies and by helping them to develop as autonomous learners. Tutors' assistance to distance learners may enable the distance learners to understand sections of their studies they have failed to understand when they were alone at their homes or their work places.

Social interaction between or amongst people about the learning material is necessary for learning (Hall & Marret, 1996:86). Waghid (1997a:113) complements the above by saying that students who are involved in dialogue are actively engaged in constructing meaning rather than being recipients of information. This interaction may take place amongst students themselves or between students and their tutors at regional centres of the particular institution involved in distance education. Each distance learner may indicate the problems he or she is faced with and tutors and other distance learners may help to solve them. In addition, Basson and Nonyongo (1997:99) see dialogical communication in face-to-face tutorials as allowing for debate and questioning by both distance learners and tutors.

Tutors enable distance learners to meet with fellow students registered at the particular institutions and doing the same course (Basson & Nonyongo 1997:101). The meeting may enable the distance learners to discuss amongst themselves the problems they are faced with in their act of learning, and solutions may thus be found.

4.5.4 Disadvantages of the role of tutors in distance education

Tutoring in distance education is not without some disadvantages. In tutors' activities there are some obstacles that need to be removed in order for the tutors to be effective. According to Basson and Nonyongo (1997:104), a large number of distance learners seems to impact negatively on dialogue because dialogue compromises attention to individuals and puts pressure on tutors involved in tutoring merely to be able to cover ground and prepare students for examination. A large number of students may prevent tutors to practise the principle of individualisation, which is important for the progress of individual distance learners.

Basson and Nonyongo (1997:105) also see shyness of students as causing scant dialogue in some groups. People who do not want to share their ideas with others may find it hard to involve themselves in dialogue with others. Tutors need to use tutoring methods such as dialogue that remove shyness from distance learners. In addition, Basson and Nonyongo (1997:105) are of the opinion that tutor and distance learners need to strive for a good relationship between themselves to be able to involve themselves effectively in dialogue.

Basson and Nonyongo (1997:105) maintain that where shyness of students has negatively impacted on dialogue, students are at an increased distance even though they are participating. The above suggests that distance learners may not participate fully if shyness of students is not addressed. In addition, Basson and Nonyongo (1997:105) view students who have many other pressing responsibilities as feeling that their needs are not being met and that they would rather be doing something at their homes than wasting their time in attending these tutorials. Tutorials need to be characterised by good

relationships and motivated participants who function like family units (Basson & Nonyongo :105).

If tutors are inexperienced or do not express themselves well in their effort to develop critical learners, they may concentrate on tutoring without giving distance learners a chance of asking questions which in turn leads to poor tutorial attendance (Basson & Nonyongo, 1997:105). The above implies that tutors need knowledge of what is meant by developing critical learners for them to be effective in their tutorial lessons. Without this knowledge tutors may fail to develop critical learners.

According to SAIDE's (1995:64) research findings the great deficiency of tutoring offered by NGO's is that of not giving proper feedback on students' needs and problems to the provider. The above implies the that feedback by tutors from NGO's on students' needs and problems may not be as exact as those given by tutors from a particular institution of distance education. Institutions offering distance education need to help NGO's in one way or another in order to make tutoring by NGO's a success.

4.6 DISTANCE EDUCATION BASED ON PRINT AS A WAY TO SATISFY SECONDARY SCHOOL TEACHERS' NEEDS RELATED TO OBE

4.6.1 Orientation

In chapter 1 it was stated that outcomes-based education endorses the concepts of lifelong learning. This implies that all people, including teachers who need to learn, are given the chance to do so by outcomes-based education. Distance education could enable secondary school teachers to improve their academic and professional competence without interfering with their family lives. All the didactic-professional needs of secondary school teachers identified in chapter 3 may be satisfied through distance education. In addition it is stated in section 4.2. that distance education is less expensive than full-time study at residential tertiary institutions. Secondary school teachers, just like any workers, may afford the fees of distance education.

Steyn (1999:211) regards teachers as learners who need the necessary opportunity to learn continually about what they are teaching, and bringing their academic and professional competence to be up-to-date with changes brought about by outcomes-based education and knowledge of the learners in their classroom. Secondary school teachers may be changed from being sources of knowledge to being facilitators of the learning process through distance education without visiting the institution offering the courses that they are doing.

Van der Horst and McDonald (1997:6) maintain that the process of change is always difficult for all the people who are involved in the change. Changes brought about by outcomes-based education may be difficult for serving secondary school teachers to understand and implement in the classroom without any form of assistance, more so because the majority of them are not trained to implement outcomes-based education. Distance education could help these teachers to change from the traditional way of teaching to the outcomes-based approach.

Van der Horst and McDonald (1997:6) see the changing of curriculum as bringing with it some soul-searching and a resistance to change by teachers. Distance education could enable teachers to understand the changes brought about by outcomes-based education and also limit the resistance to changes brought about by curriculum changes. In addition, Du Preez (1998:61) maintains that distance education aims at enabling distance learners to apply the knowledge, skills and attitudes that they have developed during their learning action in their own working situation.

4.6.2 The influence of the NQF on learning in distance education

Within the South African context the National Qualification Framework (NQF) has a prescriptive impact on higher education curricula in general and on learning material and teaching methods in particular (Wessels, 2001:221). The above suggests that distance education in tertiary institutions is also influenced by NQF. Secondary school teachers' didactic-professional needs identified in chapter 3 may be addressed by distance education as in full-time tertiary institutions.

According to Wessels (2001:222), the NQF requires materials in distance education to:

- Aim at achievements that fit into the NQF framework for learning achievements. As a result secondary school teachers may satisfy their didactic-professional needs identified in chapter 3 and at the same time acquire learning achievements that fit into the National Qualification Framework. Their learning achievements could be recognised by NQF;
- Be accessible to learners and make provision for learner mobility and progression. This could enable secondary school teachers to succeed even though they are studying the learning material on their own with little or no assistance. In addition, Peters (1998:11) maintains that the greater the accessibility of students to their subject matter, the greater the number of students. Hence secondary school teachers could be involved in distance learning;
- Bring about an improved quality of learning. Secondary school teachers may improve their academic and professional competence by learning material that brings about improved quality of learning. Many distance learners, in this regard secondary school teachers, come from a background where tertiary academic studies were not offered when they were younger (Peters, 1998:13);
- Accelerate the redress of past unfair discrimination. In chapter 2 (*cf.* 2.2) it is stated that different Departments of Education existed to different groups in South Africa and that the outcomes-based curriculum was introduced to redress the past imbalances. The above implies that NQF, just like the outcomes-based curriculum, aims to redress the imbalances that were there in the past. The previous disadvantaged secondary school teacher could be placed on equal footing with other teachers through distance education; and
- Contribute to the full personal development of distance learners. Through distance education secondary school teachers may change from conventional teaching to the outcomes-based way of teaching and

assessment. Teachers may also come to grips with learning areas that came about as a result of the merging of traditional subjects. The above suggests that the NQF requires distance education to improve secondary school teachers' academic and professional competence to be able to teach effectively in the classroom situation. Teachers may acquire new ways of learning brought about by outcomes-based education. Learners in the classrooms may play an active role in the act of learning while being taught by teachers who have been changed by distance education from being sources on knowledge to facilitators.

4.6.3 Roles for which secondary school teachers need assistance

4.6.3.1 Orientation

There are different roles brought about by an outcomes-based curriculum that need to be assumed by teacher. These roles are mostly new to teachers trained in the traditional way of teaching. Teachers may in one way or another need assistance to effectively assume these roles. The assistance may be offered by distance education. In the new outcomes-based education paradigm according to Government Gazette No: 20844 (2000:13) and Criticos, Long, Moletsane and Nthiyane (2002: 2:13), the following roles have to be assumed by teachers:

- Learning mediator;
- Interpreter and designer of learning programmes and materials;
- Leader, administrator and manager;
- Scholar, researcher and lifelong learner;
- Community, citizenship and pastoral role;
- Assessor; and
- Learning area/ subject/ discipline/ phase specialist.

4.6.3.2 Teachers as learning mediators

Potenza (2002:12) regards a mediator as a person who goes between, who facilitates a dialogue, who makes it possible for an idea or feeling to be communicated. In outcomes-based curriculum according to the Government Gazette (2000:13), teachers mediate in a manner which is sensitive to the diverse needs of learners including those with barriers to learning; construct learning environments that are appropriately contextualised and inspirational, communicate effectively, and showing recognition of and respect for the differences of others. In order for teachers to assume this position, they may somehow need to be changed from transmitters or sources of knowledge to facilitators of learning activity as the majority have been trained in the traditional way of teaching. Teachers may need to encourage learners to play an active role in their learning act and not to become passive recipients of learning material from teachers. Teachers could be required to demonstrate what needs to be demonstrated to the learners e.g. teacher could be required to demonstrate how to conduct a chemistry experiment.

Distance education may be of help in this regard to serve teachers. Teachers could be exposed to their role without visiting the institution offering distance education. Through study guides from institutions offering distance education and prescribed text books, teachers may assume the role of learning mediators in their respective classrooms. Secondary school teachers may be exposed to this role when tutors demonstrate the teacher's new role in regional centres of that particular institution of distance education or at points where distance learners sometimes meet tutors.

4.6.3.3 Teachers as interpreters and designers of learning programmes and materials

The Government Gazette No. 20844 (2000:13) maintains that teachers in the outcomes-based curriculum need to understand and interpret provided learning programmes, design original learning programmes, identify the requirements for a specific context of learning and select and prepare suitable textual and visual resources for learning. In addition, the Government Gazette No. 20844 (2000:13) also maintains that teachers in the outcomes-based

curriculum need to select sequence, and pace the learning in a manner sensitive to the differing needs of the subject/learning area and learners. If teachers are not prepared to do so, distance education could be of help in this regard. Distance education could enable secondary school teachers to design and select inputs that are suitable for learners by improving teachers' academic and professional competence.

It is also stated in chapter 2 (*cf*, 2.4.7) that learning programmes were introduced in the classroom as a result of an outcomes-based curriculum. Teachers trained in the traditional way of teaching do not have knowledge of learning programmes. Distance education in the form of print may assist these teachers to acquire knowledge of learning programmes. Teachers may also observe tutors interpreting and designing learning programmes. The above could enable the secondary school teacher to assume this role of interpreting and designing learning programmes and materials.

4.6.3.4 Teachers as leaders, administrators and managers

Teachers following the outcomes-based curriculum may be required to assume the role of leaders, administrators and managers. According to the Government Gazette No. 20844 (2000:13), teachers, while in this role, need to make decisions appropriate to the level, manage learning in the classroom, carry out classroom administrative duties effectively and participate in the school's decision making structure. Teachers trained in the traditional way of teaching may find it hard to adopt this role if they are not assisted in one way or another. Distance education could help teachers to assume this role by empowering them with knowledge and skills needed in this role.

4.6.3.5 Teachers as scholars, researchers and lifelong learners

In chapter 1 (*cf*, 1.2) it was stated that outcomes-based education endorses the concept of lifelong learning. The above suggests that the South African curriculum which has its base in OBE encourages both under-qualified and better qualified teachers to improve their academic and professional competence. This is complemented by the Government Gazette (2000:13) which maintains that in the outcomes-based curriculum teachers are expected

to achieve ongoing personal, academic, occupational and professional growth pursuing reflective study and research in their learning area, in broader professional and educational matters and in other related fields.

Through this process of lifelong learning, teachers could be in command of the learning material and their professional competence required by outcomes-based education could be attained.

Sikhavhakhavha (1999:10) regards teachers' command of the learning content and material coupled with their professional competence as determining the degree in which learners' attention and effort are drawn into the learning activity. Distance education could enable teachers to be lifelong learners while at the same time working in their respective schools. The process may also help teachers to learn teaching strategies brought about by outcomes-based education. Teachers may also observe experts demonstrating how these teaching strategies can be used in their classrooms during tutorial lessons.

4.6.3.6 Community, citizenship and pastoral role of teachers

An outcomes-based curriculum encourages teachers to assume a community, citizenship and pastoral role. The above is determined by the Government Gazette No. 20844 (2000:14) which maintains that teachers in an outcomes-based curriculum are expected to practice and promote a critical, committed and ethical attitude towards developing a sense of respect and responsibility towards others. In addition, the Government Gazette no. 20844 (2000:14) also maintains that teachers in an outcomes-based curriculum are expected to uphold the constitution and promote democratic values and practices in schools and society. As the majority, if not all, of them are not trained to do so, distance education could be of help in this regard. Teachers could be prepared for this role while working in their respective schools through distance education.

4.6.3.7 Teachers as assessors

Potenza (2002:12) sees assessment as an essential feature of the teaching and learning process. According to the Government Gazette (2000:14),

teachers in an outcomes-based curriculum are expected to design and manage both formative and summative assessment in ways that are appropriate to the level and purpose of the learner to meet the requirements of accrediting bodies. Teachers trained for conventional education may find it hard to design and manage both formative and summative assessments. In chapter 3 (*cf*, 3.4.7.1) it is stated that assessment of learners in conventional education is quite different from that of an outcomes-based curriculum. Teachers trained for conventional education may need to change from only assessing the knowledge by text and examination to assessing knowledge, skills, values and attitudes by different forms of assessment brought about by outcomes-based education.

Secondary school teachers trained in the traditional way of assessment may need knowledge of different forms of assessment brought about by outcomes-based curriculum. Through distance education new ways of assessment brought about by outcomes-based education may be learned from prepared study guides and from experience by being exposed to tutorial lessons by experts. Distance education could also enable teachers to use assessment in order to help the learners to identify the areas they need to improve in their learning activity.

4.6.3.8 Teachers as learning area specialists

In chapter 2 (*cf*, 2.4.4.1) it was stated that in an outcomes-based curriculum subjects are merged into eight learning areas in grades 8 and 9. Some of these learning areas are new fields of study. Teachers need to be learning area specialists. They need to be well versed in the content and methods of teaching this content to the learners. This is supported by Potenza (2002:12) who maintains that to be considered a specialist in one's field requires being well grounded in the knowledge, skill, value, principle, methods and procedures relevant to that field. Teachers are expected to know about different approaches to teaching and learning, and how these may be used in ways which are appropriate to the learners and the context (Government Gazette No. 20844, 2000:14). In order for teachers trained for conventional

education to be specialists in their learning areas, they may need some assistance. Distance education may be of help in this regard.

Through distance education teachers may know the content of their learning areas and different approaches to teaching and learning and how to use these in a way that is appropriate to the learners and in their contexts. Teachers' academic and professional competence may be improved through study guides, prescribed text books and other books from the library of the particular institution offering distance education.

4.7 SUMMARY

This chapter paid attention to some general aspects of distance education. This was followed by print as a form of distance education, the role of student counselling in distance education, and the role of tutors in distance education as a way to satisfy secondary school teachers' didactic professional needs.

From the foregoing discussion of the sections mentioned above it is evident that distance education based on print has an important role to play in satisfying the didactic-professional needs of secondary school teachers related to outcomes-based education. It is also evident that distance education is the only form of education in which students can learn while they are in their respective homes or work place. Family life is not interfered with in distance education.

The next chapter will pay attention to the empirical study.

CHAPTER 5

RESEARCH METHODOLOGY

5.1 INTRODUCTION

The previous chapter paid attention to the role of distance education based on print in satisfying didactic-professional needs identified in chapter 3 through literature review. In this chapter the design of the empirical research is presented as an orientation to the actual research. The chapter aims at presenting and motivating the methods and procedures to be followed to enable the researcher to gain the information that had not been gained through literature review. The discussion in this chapter focuses on the aim of the empirical study, design of research, population and sample, instrumentation and statistical techniques.

5.2 THE AIM OF THE EMPIRICAL STUDY

Borg and Gall (1989:424) maintain that the first step in carrying out a satisfactory empirical study is to define the problem and to list specific objectives to be achieved or hypotheses to be tested. This study aims to obtain information from the respondents in order to determine their perception regarding the didactic-professional needs of secondary school teachers related to outcomes-based education in the Limpopo Province and the role of distance education in meeting these didactic-professional needs. The specific objectives of the empirical study are:

- To identify the didactic-professional and academic needs of secondary school teachers related to outcomes-based education;
- To describe and assess the current role of distance education in satisfying these secondary school teachers' didactic-professional and academic needs related to OBE;

- To investigate the effectiveness of distance education to satisfy the Limpopo Venda region secondary school teachers' didactic-professional needs related to OBE; and
- To identify strategies that can be used to improve distance education.

5.3 DESIGN OF RESEARCH

5.3.1 Method

The method used is a field survey (*cf*, 1.4.2.1.) through the use of Likert-type questionnaires supplemented by structured interviews with selected persons who have studied and completed their studies through distance education, and structured discussions with seven experts in institutions offering distance education. The use of a Likert-type questionnaire has been chosen because in this type a computer could be used to represent and process data collected through written means into text that can be more closely examined and analyzed (Leedy, 1997:202).

5.3.1.1 Advantage of a questionnaire

Sidhu (1984:139) maintains that a questionnaire is used as a tool of investigation because of the following advantages:

- It is economical both for the researcher and for the respondent in terms of time, effort and cost;
- It facilitates contact with the respondents who cannot otherwise be reached;
- It has great potential for collecting data required for research purposes if properly used. In this study all scales used in the questionnaires avoided statement such as "I am not sure" or "I am not certain";
- Once it has been constructed properly, the investigator may ask anybody to administer it on his behalf. To comply with the above, questionnaires were delivered by the researcher to someone at the

schools who administered the questionnaires on the researcher's behalf;

- It places less pressure on the subjects for immediately response: the subject can answer it at leisure; and
- It helps in focusing the respondent's attention on all significant items.

Borg and Gall (1989:425) also maintain that data collected by means of a questionnaire can be used to achieve objectives other than the description of how the response of the total sample is distributed on each questionnaire item. For example, in this study data collected by means of a questionnaire was used, amongst others, to identify and categorise the didactic professional needs of secondary school teachers related to outcomes-based education.

5.3.1.2 Criticisms on a questionnaire

Using a questionnaire is not without some obstacles. Wiersma (1985:107) levels the following criticisms against the use of questionnaires:

- High non-response rate, but in this study the questionnaires were delivered to schools where respondents were working and collected from there by the researcher to overcome this problem; and
- Unreliable responses from respondents. In this study this was dealt with by not including statements such as "I am not sure" or "I am not certain" in the keys of the questionnaires. A pilot study was conducted and the questionnaire was also screened by the Statistical Consultation Services of the North-West University's Potchefstroom Campus to ensure an acceptable level of validity.

In addition, Schnetler *et al.* (1989:50), Borg and Gall (1989:446) and Sidhu (1984:139) regard the following as limitations to the use of a questionnaire:

- A structured questionnaire can result in loss of rapport and also lead to frustration when respondents feel that their personal options are not included. The above was minimised by including a few open questions

and by making sure that the provided options covered the actual situations at the schools involved;

- Questionnaire studies often do not probe deeply enough to reveal a true picture of opinions and feelings; to overcome this, interviews were also conducted. In addition, proper measures were implemented to ensure reliability of the instrument (*cf*, 5.63);
- The structured questionnaire may limit the subject's response so that some vital information may be omitted. In this study the above was minimised by including a few open types of questions that allowed respondents to give their view; and
- If the subject misinterprets a question, little can be done to detect and rectify the misinterpretation. A large sample was involved in this survey and furthermore measures to ensure reliability were implemented.

Borg and Gall (1989:440) also mention the point of time wasted by sending follow-up letters with another copy of the questionnaire and another self-addressed envelope to individuals who have not responded after the time limit the researcher has set in his or her letter of transmittal. To heed this criticism, it is stated in the paragraph above that questionnaires were delivered to respondents and collected from them by the researcher.

5.3.1.3 Questionnaire format

The following rules concerning the questionnaire format guided the design of the questionnaire (Leedy, 1997:198-199):

- Keep the questionnaire as short as possible;
- Organise the items in such away that they are easy to read and complete;
- Number the questionnaire pages and items;
- Include brief, clear instructions where they are visible;

- Organise the questionnaire in a logical sequence;
- When moving to a new topic, include a transitional sentence to help respondents switch their train of thought;
- Provide a rationale for the items so that the respondent understands their relevance to the study;
- State each item in as brief a form as possible;
- Avoid the words "questionnaire" and "checklist" on your form, rather use "survey";
- Avoid negatively stated items;
- Do not use "double-barreled" items that require the subject to respond to two separate ideas with a single answer; and
- Avoid biased or leading questions.

The format which has been used in this survey is that of closed type questions (e.g. Do you want to improve your academic qualification?) with only five open ones (e.g. Would you like to add anything?). Respondents were required to respond to the closed items according to a Likert-type scale (*cf*, appendix C).

5.3.1.4 Explanation and motivation of questionnaire

Questions in the questionnaires have been arranged into three groups as in the diagram below.

Biological and demographical data	Questions 1 to 7
Didactic-professional needs	Questions 8 to 47
Distance education based on print	Questions 48 to 81

In Part 1 (*cf*, Appendix C) the items of the questionnaire pay attention to biographical and demographical data. The aim of part one is to gather the

data about gender, age, academic and professional qualifications, positions of respondents in the teaching profession and years of experience in those positions.

Part 2 (*cf.* Appendix C) pays attention to the didactic-professional needs of secondary school teachers. The first 14 items aim to find the number of respondents who have to improve their academic and professional competence, the number of respondents who are currently improving their academic and professional competence through distance education and the number of the respondents who want to improve their academic and professional competence through distance education.

Item 21 is open and enables the respondents to give their views on why they consider distance education to improve their professional qualifications.

Items 22 to 47 of Part 2 request the respondents to indicate the degree in which secondary school teachers need assistance on the following aspects identified in chapter 3 (*cf.* 3.4.1):

- The need to know new terminology to come to grips with outcomes-based education;
- The need for teachers to change from transmitters of knowledge to facilitators of learning;
- The need to know new ways of learning according to outcomes-based education;
- The need for secondary school teachers to integrate educational activities across all eight learning areas;
- The need for secondary school teachers to promote conceptual progression in each learning area;
- The need to know teaching strategies that are relevant to outcomes-based education; and
- The need to implement new ways of assessment.

Items 48 to 56 of Part 3 aim to find out from those respondents who have experience of distance education to what extent secondary school teachers need the following in distance education (*cf*, 4.4.3 and 4.5);

- Study orientation and induction;
- Analysis of study problems including exploring examination failure and strategies;
- Training in reading skills;
- Preparation for examinations;
- Pre-course counselling;
- In-course counselling;
- Post- course counselling;
- Counselling for students; and
- Tutoring for students.

Items 57 to 66 probe the respondents' assessment of the activities of student counselling and tutorial lessons identified in chapter 4 in institutions offering distance education (*cf*, 4.4.3 and 4.5).

Items 67 to 81 aim at finding out to what extent secondary school teachers need assistance through distance education to assume the roles identified in chapter 4 (*cf*, 4.6.3.1.) as

- Learning mediator;
- Interpreter and designer of learning programmes and materials;
- Leader, administrator and manager;
- Scholar, researcher and lifelong learner;
- Community, citizenship and pastoral role;

- Assessor; and
- Learning area/ subject/ discipline/ phase specialist role.

The last four questions are open and enable the respondents to give their views on what is lacking in distance education based on print and the most positive aspect of it. The aim is to shed light on appropriate ways in which different didactic-professional needs may be satisfied through distance education based on print.

5.3.1.5 Explanation and motivation of structured discussions with the experts

Questions of structured survey have been grouped as follows:

Student counselling in distance education	Questions 1 to 7
Tutoring in distance education	Questions 8 to 17

Part 1 (*cf*, Appendix E.) of the structured discussions schedule pays attention to how student counselling is at present being conducted and how it can be improved. Items 1 to 7 of Part 1 aim at finding the purpose of counselling, criteria for being a student counsellor, the degree of occurrence of activities of student counselling and how counselling can be improved. Items 8 to 17 of Part 2 (*cf*, Appendix E) pay attention to criteria for being a tutor, how tutoring can be of help to distance learners and strategies that will enable tutoring to address secondary school teachers' needs related to outcomes-based education.

5.3.1 Guidelines for conducting research interviews with teachers and managers

Stake (1995:64) maintains that much of what we cannot observe for ourselves has been or is being observed by others. In this study structured interviews were conducted in order to obtain information that the researcher could not find from the questionnaire responses of teachers and from literature review.

According to Leedy (1997:199), a structured interview includes a series of closed form questions similar to those used in a questionnaire. The questions for the interview need to be as carefully planned and as accurately worded as the items in a questionnaire (Leedy, 1997:199). The responses to the interview are audio taped and captured by means of field notes taken by the researcher. Ten people who have already improved their academic-professional competence through distance education have been used in the interviews. Convenience sampling has been used to select the sample for interviews because specific people have been targeted .

When interviews were conducted the following guidelines by Gall, Borg and Gall (in Leedy, 1997:199-200) were taken into consideration (cf, Appendix F):

- Assure respondents of confidentiality before beginning the interview;
- Build rapport by engaging in small talk before beginning the interview and by using an everyday conversational style;
- Ask questions that contain only a single idea;
- Use simple probes when appropriate e.g. What needs to be done to improve the present situation?
- If a respondent seems threatened by a specific topic, move on to another and try to return to the topic later, with different phrasing;
- When posing threatening or sensitive questions, ask the respondents about the behaviour of friends;
- Avoid contradiction or appearing to cross-examine the respondent;
- Do not hint by specific comment, tone of voice, or nonverbal cues such as shaking head at preferred or expected responses to a particular question;
- Do not ask many closed form questions in succession;
- Do not change interview topics too often; and

- Avoid leading questions.

The following steps by Leedy (1997:201) were taken into consideration to gather data through interviews for this research:

- Set up the interview well in advance;
- Send a sample of questions you will ask to the interviewee. In this case interviewees were presented with the interview questions to study before the interviews.
- Ask for permission to tape the interviews;
- Confirm the date as soon as possible;
- Be prompt; follow the agenda; have a copy of your questions for your interviewee in case he or she has mislaid his or her copy; and
- After you have incorporated the material into your research report, send that section of the report to the interviewee for final approval and get written permission to use the data in your report.

In chapter 1 (*cf*, 1.4.2.1) it is stated that the interview aims at finding strategies for distance education based on print to satisfy the identified didactic-professional needs related to OBE of the Limpopo Province Venda region secondary school teachers. Items of the interview are based on the above, specifically with regard to counselling and tutoring (*cf*, 4.4 and 4.5).

Part 1 (*cf*, Appendix) of the interview with secondary school teachers pays attention to how distance learners benefit from the activities of student counsellors and what could be done to improve the present activities of student counselling. Items of Part 2 (*cf*, Appendix F) pay attention to the benefit distance learners get from tutorial lessons and how tutoring in distance education based on print could be implemented to address the needs of secondary school teachers related to outcomes-based education.

The interview questions for secondary school teachers have been grouped as in the diagram below.

Student counselling in distance education	Questions 1 to 6
Tutoring in distance education	Questions 7 to 16

5.4 POPULATION AND SAMPLE

Population and sample have been dealt with in Chapter 1 (*cf.* 1.4.2.2). The population was all the secondary school teachers and school managers in the former Venda in the Limpopo Province [N = approx. 2400]. The population included approximately 240 teachers who were already improving their academic-professional competence through distance education (Anon, 2000). In accordance with Leady and Ormrod (2001:221), a stratified systematic sample of at least 240 secondary school teachers and 60 school managers is sufficient. For the purpose of the investigation a sample of 331 was drawn of which 22 did not respond. The final sample of 249 teachers and 60 school managers included 148 persons who were already involved with distance education.

The selected 148 were used to realise aims 1.4.2.1 (2), (3) above. Based upon their responses to the questionnaires, a feasible number of 10 suitable candidates to be interviewed had been identified to realise aim 1.4.2.1 (4) above. A convenience sample was used to select the sample for interview because teachers who were improving their academic or professional qualifications through distance education were specifically targeted.

A structured discussion with 7 experts in the field of distance education was conducted. A convenience sample was used to select these 7 experts in the field of distance education.

5.5 THE SETTING OF THE RESEARCH

The research was conducted in a rural area characterised by poor working conditions and a low economic life-style. The majority of learners in this area

usually comes to school with worn-out clothes. Some of the learners can not even afford school fees. During the time of this research teachers living in this area had the following professional qualifications:

- Primary Teachers Certificate (PTC). The duration of training in this profession is 2 years. The training focuses more on pedagogical matters than on academic matters. It is directed at the teaching of children in primary schools.
- Senior Primary Teachers Certificate (SPTC). The duration of training in this profession is 2 years. The focus of training is more on pedagogical matters than on academic matters. It is directed at the teaching of children in senior primary schools.
- Junior Secondary Teachers Certificate (JSTC). The duration of training in this profession is 2 years. The training focuses more on academic matters than on pedagogical matters. It is directed at the teaching of children in junior secondary schools.
- Secondary Teachers Diploma (STD). The duration of training in this profession is 3 years. The focus of training is more on academic matters than on professional matters. It is directed at teaching children in secondary schools.
- University or Higher Education Diploma (UED/HED). This is a 1 year teaching diploma following a junior degree. It is directed at the teaching of children in secondary schools.
- An integrated degree is a four-year professional degree. It focuses on both academic and professional training. It is directed at teaching children in secondary schools.

In the schools where this research was conducted there were no teachers without a post-school qualification.

5.6 STATISTICAL TECHNIQUES

5.6.1 Orientation

The following statistical techniques were used:

- Factors analysis;
- Measures of reliability of factors as instruments;
- Measures of central tendency and variance; and
- Effect sizes.

5.6.2 Factor analysis

Exploratory factor analysis was conducted on the different sub-sections in the questionnaire to identify factors coming from the investigation of teachers' needs related to OBE, the role of distance education in satisfying teachers' didactic-professional needs, opportunities for student counselling and tutorial lessons in distance education and distance education as a way to satisfy secondary school teachers' didactic-professional needs. Factor analysis is a statistical technique for synthesizing a large amount of data (Bailey, 1987: 353). Instead of discussing every separate item in the sections subjected to factor analysis, the identified factors are discussed. The above is supported by Erasmus (2002: 121) who says that after the factor analysis has been completed, the factors are interpreted and named. In this study 12 factors were identified in four categories (*cf*, 6.4.1.1).

5.6.3 Reliability of factors

Cronbach (*in* Nunnally, 1978:294) maintains that Cronbach's Coefficient Alpha estimates the reliability of this type of scale by determining the internal consistence of the test or average correlation of items within the test. Interrelated items could be added up to obtain an overall score for each factor (Nunnally, 1978: 294). In this study Cronbach's Coefficient Alpha of each factor was therefore determined as a measure of reliability of the factors as instruments (*cf*, 6.4.1.2).

5.6.4 Measures of central tendency and variance

The mean describes the location of scores while the standard deviation describes the spread in the scores. In this study means were used as measures of the importance or weight the respondents attached to factors. Standard deviations were used as a measure of concurrence in the opinion of the respondents. In particular the Coefficient of Variation (CV), which expresses the standard deviation (SD) as a percentage of the mean of the scores, was used (Steyn et al, 1998 : 140).

$$CV = \frac{SD}{mean} \times \frac{100}{1}$$

With SD = stand. dev. of scores

mean = mean of scores

5.6.5 Effect sizes

Practical significance of differences can be understood as a large enough difference to have an effect in practice. A natural way to comment on practical significance is to use the standardised difference between the means of two populations (Ellis & Steyn, 2003:52). The effect size is introduced that makes the difference independent of units and sample size and also relates the difference to the spread of the data.

In cases where more than two groups were involved, the effect size (d-value) was computed using the following formula:

$$d = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{mse}}$$

Where $\bar{x}_1$ = mean of one group

$\bar{x}_2$ = mean of another group.

$\sqrt{mse}$ = Square root of mean square error of the ANOVA (Ellis & Steyn, 2003: 52).

In case where two groups were involved the d-value was computed using results of the T-test. The following formula was applied.

$$d = \frac{x_1 - x_2}{\sqrt{S_{\max}}}$$

Where $S_{\max}$ = maximum standard deviation of the two sample (Ellis & Steyn, 2003: 52).

The following two cut-off points which render significant differences according to Cohen (in Lowson, 1997: 132) were used to indicate the effect of differences between the groups:

$0,5 \leq d < 0,8$ difference with medium effect, which may indicate practical significance.

$d \geq 0,8$: difference with large effect, i.e. practically significant difference.

5.7 SUMMARY

In this chapter the aim of the empirical study, design of research, population and sample, instrumentation and statistical technique were discussed. Chapter 6 will pay attention to the analysis and interpretation of data collected.

CHAPTER 6

CRITERIA AND GUIDANCE FOR DISTANCE EDUCATION TO SATISFY SECONDARY SCHOOL TEACHERS' DIDACTIC-PROFESSIONAL NEEDS RELATED TO OBE

6.1 INTRODUCTION

The previous chapter presented the design of the empirical research as orientation to the actual research. This chapter aims to represent the analyses and interpretation of the data collected. The chapter starts by giving the interpretation of the quantitative data collected by means of a questionnaire. The last part pays attention to the interpretation of qualitative data collected by means of structured discussions and interviews, and criteria and guidelines for implementing distance education based on print are given. Analysis of data was performed using SAS (SAS Institute Inc.,1999).

6.2 REPRESENTATION OF BIOGRAPHICAL AND DEMOGRAPHICAL DATA OF THE RESPONDENTS

Part one of the questionnaire was designed to gather biographical and demographical characteristics of the respondents. Frequencies and percentages were used in interpreting the biographical and demographical data of the respondents. Twenty two (7,0%) of 331 questionnaires were not returned.

6.2.1 Gender of the respondents

The table below shows the gender of the 306 respondents.

Table 6.1 Gender of the respondents

Gender	Frequency	Percentage
Male	213	69.6
Female	93	30.4
Total	306	100%

- 3 Respondents did not respond to this item.

Table 6.1. shows that there are more male respondents than female respondents in the sample. The above implies that the sample reflects the gender imbalance observed in the Venda region of the Limpopo Province.

6.2.2 Ages of the respondents

The table indicates the ages of the 304 respondents.

Table 6.2: Ages of the respondents

Age	Frequency	Percentage
20-29	9	3.0
30-39	137	45.1
40-49	136	44.7
50+	22	7.2
Total	304	100%

- 5 respondents did not respond to this item.

Table 6.2 shows that 97,0% of the respondents were above the 20-29 age group. This shows that the majority of the respondents in this research are fairly matured and experienced.

6.2.3 Academic qualifications of the respondents

In the following table the highest academic qualifications of 305 respondents are indicated.

Table 6.3 Highest academic qualifications of respondents

Academic Qualification	Frequency	Percentage
Std 10 + diploma (3 years) or certificate (2 years)	154	50.35
B. degree (3 years)	68	22.3
B Ed/honours/ Technikon Degree (4 years)	75	24.6
Advanced degree (M or D degree)	8	2.6
Total	305	100%

- 4 respondents did not respond to this item.

The above shows that the majority of respondents are sufficiently academically qualified to teach at secondary schools. However, there are still a substantial number of respondents that still may not fully comply with the minimum requirement stated by the South African School Act (SASA) (*cf*, 6.24).

6.2.4 Professional qualifications of the respondents

Professional qualifications of 303 respondents are indicated in the table below.

Table 6.4 Professional qualifications of the respondents

Professional Qualification	Frequency	Percentage
PTC or SPTC	9	3.0
JSTC	54	17.8
STD	154	50.8
UED/ HED	76	25.1
Integrated degree	10	3.3
Total	303	100%

- 6 respondents did not respond to this item.

If this is compared to the minimum requirements for teachers to teach at secondary schools of South Africa, one can say that the majority of participants are professionally sufficiently qualified. According to the Government Gazette (2000:4), in order for one to be registered with the South African Council of Educators (SACE) as a professional qualified teacher, a minimum of REQV13 is required (ie. a minimum of a 3-year diploma in education).

6.2.5 Positions of the respondents

The positions of 306 respondents are indicated by the table below.

Table 6.5 Positions of the respondents

Position	Frequency	Percentage
Teacher	246	80.4
Departmental head	21	6.9
Deputy principal	16	5.2
Principal	23	7.5
Total	306	100

- 3 respondents did not respond to this item.

Table 6.5. shows that 80% of the respondents are teachers who actually have to implement the outcomes-based curriculum and 20% are school managers who facilitate teachers to implement the outcomes-based curriculum .

6.2.6 Experience in the post

Experience of 302 respondents in their posts is shown by the table below.

Table 6.6 Experience of respondents in their posts

Year	Frequency	Percentage
0-5	36	11.9
6-10	47	15.6
11-16	117	38.7
16-20	62	20.5
21+	40	13.3
Total	302	100%

- 7 respondents did not respond to this item.

The above suggests that the majority of respondents are well experienced in their posts, and that they have been trained as teachers prior to the introduction of an outcomes-based curriculum, i.e. in a traditional mode of training, and may still need assistance in order for them to teach in an outcomes-based way.

6.2.7 Levels of academic training for the subjects taught

Levels of academic training of respondents for the subjects they were teaching are indicated in the table below.

Table 6.7 Highest academic qualifications the respondents recieved for the subjects they were teaching

Academic training	Frequency	Percentage
None	34	11.1
Std10	22	7.2
College training	121	39.5
Course one of a degree	20	6.5
Course two of a degree	59	5.9
Course three of a degree	59	19.3
Post-graduate	32	10.5
Total	306	100%

- 3 respondents did not respond to this item.

The above indicates that officially the teaching personnel participating in the research are academically mostly appropriately qualified to teach secondary school learners.

6.2.8 Summary of biographical and demographical data of the respondents

From the above information it can be stated that there are more male than female respondents in the sample. Secondly, the majority of respondents are fairly mature. It can also be stated that the majority of respondents may still need assistance in order for them to teach in an outcomes-based way even though they are academically and professionally suitably qualified in terms of the level of study and years of study but they have not been trained for the outcomes-based curriculum specifically.

6.3 INTERPRETATION OF DATA RELATED TO DISTANCE EDUCATION AS A MEANS OF IMPROVING COMPETENCE

Part 2 of the questionnaire was designed to gather information on teachers' improvement of their academic and professional competence. Again frequencies and percentages were used in interpreting the data on teachers' improvement of academic and professional competence. The presentation follows the format of the questionnaire.

6.3.1 The improvement of academic and professional competence

6.3.1.1 The improvement of academic qualifications by respondents

The table below shows the number of respondents who have improved their academic qualification while they were working and those who did not.

Table 6.8 Improvement of academic qualifications by respondents

Have you improved your academic qualifications while you were working?	Frequency	Percentage
Yes	181	59.2
No	125	40.8
Total	306	100%

- 3 respondents did not respond.

Table 6.8 shows that the majority of respondents have already improved their academic competence while working which suggests that they realise their need to improve their own academic competence.

6.3.1.2 Way in which academic qualifications were improved by respondents

The 181 respondents who indicated that they have improved their academic qualifications while they were working were asked to respond on whether this was done through distance education or not.

Table 6.9 Way through which academic qualifications were improved by respondents

Was it done through distance education?	Frequency	Percentage
Yes	152	84.0
No	29	16.0
Total	181	100%

Table 6.9. emphasizes the importance of access to distance education for respondents who want to improve their academic qualifications.

6.3.1.3 Acquisition of post-graduate degrees or technikon degrees

The table below shows the number of respondents who have acquired post graduate degrees or technikon degrees while they were working and those who did not.

Table 6.10 Acquisition of post-graduate degrees or technikon degrees while working

Have you earned a post-graduate or technikon degree while you were working?	Frequency	Percentage
Yes	104	34.3
No	199	65.7
Total	303	100%

- 7 respondents did not respond to this item.

Table 6:10 shows that the majority of respondents did not earn a post-graduate or technikon degree to improve their academic competence while they were working.

6.3.1.4 Way by which post-graduate or technikon degrees were earned

Those 104 respondents who earned a post-graduate or technikon degree were asked to respond on whether this was done through distance education or not.

Table 6.11 Way by which post-graduate or technikon degrees were earned

Was this earned through distance education?	Frequency	Percentage
Yes	95	91.3
No	9	8.7
Total	104	100%

The above shows that distance education is essential for respondents to improve their academic qualifications at the post-graduate or technikon degree level.

6.3.1.5 Current involvement in improvement of academic qualifications

In the table below respondents currently involved in the improvement of academic qualifications are distinguished from those who are not.

Table 6.12 Current involvement in improvement of academic qualifications by teachers

Are you currently improving your academic qualifications?	Frequency	Percentage
Yes	156	51.3
No	148	48.7
Total	304	100%

- 5 respondents did not respond to this item.

Table 6.12. shows that the majority of respondents are aware of the need for them to improve their academic qualifications. The reason might be the introduction of the outcomes-based curriculum in secondary schools.

6.3.1.6 Current way used to improve academic qualifications

Those 156 respondents who are currently improving their academic qualifications were asked to indicate whether they were doing this through distance education or not.

Table 6.13 Current way used to improve the academic qualifications

Are you doing the above through distance education?	Frequency	Percentage
Yes	130	83.3
No	26	16.7
Total	156	100%

Table 6.13. Shows that distance education is essential for respondents to improve their academic qualifications.

6.3.1.7 Improvement of professional qualifications

The table below distinguishes respondents who have improved their professional qualification from those who have not.

Table 6.14 Improvement of professional qualifications while working

Have you improved your professional qualifications while you were working?	Frequency	Percentage
Yes	77	25.6
No	224	74.4
Total	301	100%

- 8 respondents did not respond.

Table 6.14. shows that the majority of respondents have not improved their professional qualifications while working.

6.3.1.8 Way in which the respondents improved their professional qualifications

Those 77 respondents who have improved their professional qualifications while working were asked to respond on whether they improved their professional qualifications through distance education or not.

Table 6.15 Way in which the respondents improved their professional qualifications

Was it done through distance education?	Frequency	Percentage
Yes	62	80,5
No	15	19,5
Total	77	100

Table 6.15 shows that distance education is essential for respondents to improve their professional qualifications.

6.3.1.9 The desire to improve academic qualifications

The table below distinguishes respondents with a desire to improve their academic qualifications from those with no such desire.

Table 6.16 The desire to improve academic qualifications

Do you want to improve your academic qualifications?	Frequency	Percentage
Yes	272	89.2
No	33	10.8
Total	305	100%

- 4 respondents did not respond to this item.

Table 6.16. shows that the majority of respondents have the desire to improve their academic qualification which indicates their awareness of their needs in this regard.

6.3.1.10 Way in which the desire to improve academic qualification could be fulfilled

Those 272 respondents who wanted to improve their academic qualifications were asked whether they would consider distance education to improve their qualifications.

Table 6.17 Way in which the desire to improve academic qualifications could be fulfilled

Would you consider distance education to improve academic qualifications?	Frequency	Percentage
Yes	246	90.4
No	26	9.6
Total	272	100%

Table 6.17. shows that the majority of respondents preferred distance education as a way for them to fulfill their need to improve their academic qualifications.

6.3.1.11 Reasons why distance education was considered to improve academic qualifications

The respondents were also given an open-ended question on the reasons why distance education was considered to improve their academic qualifications. The following were responses of the 246 respondents who prefer distance education based on print:

89 (36,2%) respondents felt that one studies while one is at home and working.

24 (9,8%) felt that distance education is cheaper compared to full-time studies.

22 (8,9%) felt that there is “no time for full-time studies”.

21 (8, 5%) felt that distance learners work at their own pace.

18 (7,3%) felt that distance learners are not separated from their families.

16 (6,5%) felt that distance education is more accessible to teachers than are full-time studies.

11 (4,5%) felt that distance education allows teachers to have enough time for learners in the classroom.

4 (1,6%) felt that it is difficult to get study leave.

3 (1,2%) felt that distance education gives teachers the opportunity to apply newly acquired knowledge and skills in their respective schools.

38 (15.5%) of the respondents who chose distance education as means of improving their qualifications did not respond to this question.

The above suggests that the main reasons why distance education is essential for teachers to improve their academic qualification are accessibility and studying while one is at home and working.

6.3.1.12 The desire to improve professional qualifications through distance education

The following table shows the number of respondents who desire to improve their professional qualifications and those with no such desire.

Table 6.18 The desire to improve professional qualifications through distance education

Do you want to improve your professional qualifications?	Frequency	Percentage
Yes	185	60.9
No	119	39.1
Total	304	100%

- 5 respondents did not respond to this item.

Table 6.18. shows that the respondents largely have a desire to improve their professional qualifications, which might indicate their awareness of their needs in this regard.

6.3.1.13 Way in which the desire to improve professional qualifications could be fulfilled

Those 185 respondents who wanted to improve their professional qualifications were asked whether they would consider distance education to improve their qualifications.

Table 6.19 Way in which the desire to improve professional qualifications could be fulfilled

Would you consider distance education?	Frequency	Percentage
Yes	161	87.0
No	24	13.0
Total	185	100%

Table 6.17 shows that distance education is preferred by respondents above other forms of studies such as fulltime study to improve their professional qualifications.

6.3.1.14 Reasons why distance education was considered to improve professional qualifications

The respondents were also given an open-ended question on reasons why distance education was considered to improve professional qualifications. The following were responses of 161 respondents who preferred distance education over full-time studies.

39 (24,2%) respondents felt that distance education is suitable and accessible to serving teachers.

14 (8,7%) felt that as teachers they cannot attend to their studies full-time.

13 (8,1%) felt that distance education enables them to study at their own pace.

12 (7,5%) felt that distance education is time saving.

12 (7,5%) felt that distance education enables teachers to be with their learners in their respective schools.

7(4,3%) felt that distance education is affordable.

6 (3,7%) felt that distance education does not separate them from their families.

6 (3,7%) felt that there is no alternative in their area which might enable them to study while at home.

4 (2,5%) felt that distance education enables teachers to apply newly acquired knowledge and skills in the classroom situation.

3 (1,9%) felt that it is difficult to be granted study leave.

2 (1,2%) felt that distance education enables them to improve their professional qualifications.

53 (26,7%) respondents did not respond.

The above confirms that the main reasons why distance education is essential for teachers to improve their professional qualifications are accessibility and studying while one is at home and working.

6.3.1.15 Summary of the findings on improvement of academic and professional competence

When teachers want to improve their academic or professional qualifications, it is important to have distance education. Because of local conditions, distance education based on print might be the most appropriate form (*cf*, 4.3). The main reasons advanced by respondents, why they prefer distance education, are accessibility and studying while one is at home and working.

6.4 ANALYSIS OF GROUPS' RESPONSES

6.4.1 Results

6.4.1.1 Factor analysis

The categories of the identified factors are as follows:

- *Category 1 : Teachers' needs related to OBE.*

The factors of category 1 come from 26 questions of the questionnaire that are shown in the table below (*cf*, Appendix C).

Table 6.20: Rotated factor pattern regarding teachers' needs related to OBE

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Communality
Q 28	0.68	-	-	-	-	-	0.61
Q 27	0.66	-	-	-	-	-	0.52
Q 30	0.64	-	-	-	-	-	0.56
Q 33	0.57	-	-	-	-	-	0.51
Q 29	0.54	-	-	-	-	-	0.46
Q 31	0.52	-	-	-	-	-	0.46
Q 32	0.49	-	-	-	-	-	0.48
Q 45	-	0.77	-	-	-	-	0.70
Q 44	-	0.69	-	-	-	-	0.61
Q 46	-	0.67	-	-	-	-	0.62
Q 43	-	0.52	-	-	-	-	0.52
Q 46	-	0.45	-	-	(0.40)	-	0.50
Q 42	-	-	0.69	-	-	-	0.63
Q 40	-	-	0.66	-	-	-	0.61
Q 41	-	-	0.65	-	-	-	0.59
Q 23	-	-	-	0.78	-	-	0.72
Q 22	-	-	-	0.71	-	-	0.65
Q 24	-	-	-	0.67	-	-	0.63
Q 25	-	-	-	0.47	-	(0.40)	0.53
Q 26	(0.44)	-	-	0.45	-	-	0.49
Q 38	-	-	-	-	0.78	-	0.67
Q 34	-	-	-	-	0.76	-	0.69
Q 47	-	-	-	-	0.66	-	0.62
Q 37	-	-	-	-	-	0.65	0.58
Q 35	(0.43)	-	-	-	-	0.56	0.56
Q 39	-	-	(0.44)	-	-	0.47	0.48

- Entries indicate the loading factors of items in the factor analysis (only values $\geq 0,40$ were used)

This category is composed of the following six factors:

Factor 1: Learning strategies centering around learners' activities.

The above factor is composed of the following items:

- Learning through discovery.
- Learning through communication with others.
- Learning when learners are not afraid of failing.
- Use of real-life situations in teachers' teaching.
- Lesson planning.
- Creating learning environments.
- Facilitating learning.

Factor 2: Learner-centred assessment strategies.

The above factor is constituted of the following items:

- Assessing through independent learning.
- Assessing through peer assessment.
- Assessing through self-assessment.
- Assessing through observation sheets.
- Assessing through journals.

Factor 3: Learner performance assessment strategies.

The above factor is constituted of the following items:

- Assessing through performance assessment.

- Assessing through portfolio assessment.
- Assessment through problem solving.

Factor 4: Outcomes and methods of achieving the outcomes.

The above factor is constituted of the following items:

- Critical and developmental outcomes.
- Learning outcomes.
- Learning programmes.
- Assessment standards.
- Learning through doing things.

Factor 5: Educator-centred teaching and assessment strategies.

Educator-centred teaching and assessment strategies are constituted of the following items:

- Teaching through straight-forward presentation of facts, concepts or skills.
- Teaching through educator-centred strategy.
- Assessing through teacher-made tests.

Factor 6: Learner-centred teaching strategies.

The above factor is constituted of the following items:

- Teaching through learner-centred strategy.
- Teaching through co-operative learning strategy.
- Teaching through discovery-learning strategy.

The identified six factors explained 58,04% of the variance in the respective items. In all six factors the communality ranges from 0,46 to 0,72. Hence it is valid to work with the six factors instead of with separate items (Bartholomew, Steele, Moustaki & Galbraith, 2002:153).

- *Category II: The role of student counselling and tutors in distance education.*

The factors of Category II come from 9 questions in the questionnaire and are shown in the table below (*cf.* Appendix C).

Table 6.21: Rotated factor pattern regarding role of student counselling and tutors in distance education

Item	Factor 1	Factor 2	Communality
Q 53	0.80	-	0.66
Q 54	0.74	-	0.59
Q 52	0.71	-	0.56
Q 55	0.63	-	0.46
Q 56	0.61	-	0.44
Q 51	-	0.78	0.68
Q 49	-	0.77	0.64
Q 50	-	0.76	0.62
Q 48	-	0.67	0.51

- Entries indicate the loading factors of items in the factor analysis (only values $\geq 0,40$ were used).

This category is composed of the following two factors:

Factor 1: Counselling.

The above factor is constituted of the following items:

- Pre-course counselling.
- In-course counselling.
- Post-course counselling.
- Counsellor for students.
- Tutors.

Factor 2: Preparation for study.

Preparation for study is constituted of the following items:

- Study orientation and induction.
- Analysis of study problems related to the learning content.
- Reading skills.
- Preparation for examination.

The identified two factors explained 57,51% of the variance in the respective items. In both factors the communality estimates range from 0,44 to 0,68. Hence it is valid to work with the two factors instead of with separate items.

- *Category III: Opportunities for student counselling and tutorial lessons in distance education*

Category III's factors come from 10 questions in the questionnaire that are shown in the table below (*cf.* Appendix C).

Table 6.22: Rotated factor pattern regarding opportunities for student counselling and tutorial lessons in distance education

<i>Item</i>	Factor 1	Factor 2	Communality
Q 60	0.77	-	0.62
Q 58	0.76	-	0.67
Q 61	0.74	-	0.66
Q 59	0.72	-	0.61
Q 57	0.69	-	0.61
Q 66	-	0.83	0.73
Q 63	-	0.82	0.74
Q62	(0.41)	0.69	0.65
Q 65	-	0.67	0.60
Q 66	-	0.65	0.52

- Entries indicate the loading factors of items in the factor analysis (only values $\geq 0,40$ were used).

Category III is composed of the following two factors:

- *Factor 1: Preparation for study.*

Preparation for study is constituted of the following items:

- Study learning management.
- Analysis of study problems.
- Reading skills.
- Preparation for examination.
- Study orientation and induction.

- *Factor 2: Counselling.*

This factor is constituted of the following items:

- Pre-course counselling.
- In-course counselling.
- Post-course counselling.
- Face to face tutoring which is usually done in groups.
- Occasional one-to-one sessions with tutors.

The identified two factors accounted for 57,5% of the variance in the respective items. The communality estimates ranges from 0,52 to 0,74. Hence it is valid to work with the two factors instead of with separate items.

- *Category IV: Distance education as a way to satisfy secondary school teachers' didactic-professional needs.*

The factors of Category IV come from 10 questions in the questionnaire and are shown in the table below (*cf*, Appendix C).

Table 6:23: Rotated factor pattern regarding distance education as a way to satisfy secondary school teachers' didactic-professional needs

Item	Factor 1	Factor 2	Communality
Q 68	0.79	-	0.63
Q 70	0.69	-	0.61
Q 67	0.67	-	0.50
Q 71	0.67	-	0.59
Q75	0.66	-	0.53
Q 76	0.62	-	0.47
Q 69	0.53	-	0.40
Q 73	-	0.82	0.76
Q 72	-	0.81	0.74
Q 74	-	0.81	0.71

- Entries indicate the loading factors of items in the factor analysis (only values $\geq 0,40$ were used).

This category is composed of the following two factors:

Factor 1: Roles of teachers.

This factor is constituted of the following items:

- Distance education as a way to enable teachers to become administrators.
- Distance education as a way to enable teachers to become learning mediators.

- Distance education as a way to enable teachers to become the interpreters of learning content.
- Distance education as a way to enable teachers to become assessors of learning in OBE.
- Distance education as a way to enable teachers to become managers of schools.
- Distance education as a way to enable teachers to become learning area specialists.
- Distance education as a way to enable teachers to become lifelong learners.

Factor 2: Support by teachers.

The factor is constituted of the following items:

- Distance education as a way to enable teachers to develop supportive relations with parents and other key persons and organisations based on critical understanding of community development issues.
- Distance education as a way to enable teachers to develop a supportive and empowering environment for learners.
- Distance education as a way to enable teachers to respond to the educational and other needs of learners and fellow educators.

The identified two factors accounted for 59, 96% of the variance in the respective items. The communality estimates ranges from 0,40 to 0,76. Hence it is valid to work with the two factors instead of with separate items.

6.4.1.2 Reliability of instruments

The table below show the reliability of the 12 factors as a measuring instrument in this research.

Table 6.24: Reliability of instruments

Factors	Cronbach's Alpha
Category 1	
Learning strategies centering around learners' activities	0,83
Learner-centred assessment strategies	0,78
Learner performance assessment strategies	0,76
Outcomes and methods of achieving them	0,79
Educator-centred teaching strategies	0,71
Learner-centred teaching strategies	0,64
Category 2	
Counselling	0,79
Preparation for study	0,78
Category 3	
Preparation for study	0,85
Counselling	0,86
Category 4	
Role of teachers	0,85
Support by teachers	0,83

The 12 factors have a high to very high reliability as measuring instruments in this investigation (SAS Manual, 1999:294).

6.4.1.3 Importance of factors

The mean score for each factor was determined as an indication of the overall importance of that factor on the original scale of measurement. The following scale was used:

1= Definitely

2= In many areas

3= In few areas

4= Definitely not

- *Category 1: Teachers' needs related to OBE*

Table 6.25: Means and standard deviation of teachers' needs related to OBE

VARIABLE	N	Mean	Std Dev	CV	Minimum	Maximum
Learning strategies centering around learners' activities	306	1.85	0.60	32	1.00	4.00
Learner-centred assessing strategies	306	1.96	0.65	33	1.00	4.00
Learner performance assessment strategies	306	1.87	0.67	36	1.00	4.00
Outcomes and methods of achieving outcomes	306	1.76	0.60	34	1.00	4.00
Educator-centred teaching assessment strategies	306	2.25	0.85	38	1.00	4.00
Learners-centred teaching strategies	306	1.87	0.62	33	1.00	4.00

Table 6.25. shows that the majority of the respondents viewed the identified six factors on teachers' needs related to OBE as important. In these six factors the means are close to 2 (in many areas) on a 4-point scale. The CV for each item is also approximately 35%, which indicates little difference in the variance of responses to the six items (SAS manual, 1999: 294). This could be due to the

fact that the majority of secondary school teachers started teaching before the introduction of OBE. It is stated in chapter 1 (*cf*, 1.2) that pre-service and in-service training available in the Venda region of the Limpopo Province does not seem to satisfy secondary school teachers' didactic-professional needs stemming from the curriculum changes required by OBE.

- *Category II: The role of student counselling and tutoring in distance education.*

Here are the results where only distance learners were used.

Table 6.26: Means and standard deviation of the role of student counselling and tutors in distance education

FACTORS	N	Mean	Std Dev	CV	Minimum	Maximum
Counselling	209	1.95	0.66	34	1.00	4.00
Preparation for study	209	1.99	0.68	34	1.00	4.00

In Table 6.26 the majority of the respondents viewed the identified two factors on the role of student counselling and tutors in distance education as important. In both factors the means are close to 2 (in many areas). The CV is 34% in both items which indicates little variance. This supports what has been said in chapter 4 (*cf*, 4.2.5.), that distance learners need to be given enough support in the form of counselling.

- *Category III: Opportunities for student counselling and tutorial lessons in distance education.*

Table: 6.27: Means and standard deviation of opportunities for student counselling and tutorial lessons in distance education

FACTORS	N	Mean	Std Dev	CV	Minimum	Maximum
Preparation for study	209	2.56	0.79	31	1.00	4.00
Counselling	209	2.74	0.82	30	1.00	4.00

The means of table 6.27 are close to 3 (sometimes occurs) indicating that respondents are in fair agreement that these factors are not treated sufficiently in distance education. The CV is 30% and 31% respectively, which indicates little variance. The above suggests that the way in which preparation for study and counselling is being handled in institutions offering distance education can still be improved in order for distance education to satisfy teachers' didactic-professional needs.

Category IV: Distance education as a way to satisfy secondary school teachers' didactic-professional needs.

Here are the results of only distance learners were used.

Table 6.28: Means and standard deviation for distance education as a way to satisfy secondary school teachers' didactic-professional needs

FACTORS	N	Mean	Std Dev	CV	Minimum	Maximum
Roles of teachers	209	1.78	0.59	33	1.00	4.00
Support by teachers	209	1.80	0.69	38	1.00	4.00

Table 6.28 shows that the majority of the respondents view the identified two factors on distance education as a way to satisfy secondary school teachers' didactic-professional needs as important. In both identified factors the means are

close to 2 (in many areas) with CV that are 33% and 38% indicating a high degree of agreement of opinions. The results show that distance education can be used to assist teachers to acquire their didactic-professional needs related to OBE.

- Summary of the importance of factors.

In all six factors in category I the means are close to 2 (in many areas) with a high degree of agreement of opinions. The above suggests that respondents need all the identified didactic-professional needs related to OBE.

Category II shows that in both factors the means are approximately 2 (in many areas) with a high degree of agreement. The above implies that distance learners, in this case teachers, need to be given enough support in the form of counselling.

In category III the means are close to 3 (sometimes occurs), indicating that respondents are high in agreements that preparation for study and counselling sometimes occurs in distance education.

Category IV shows that in the two identified factors the means are close to 2 (in many areas), indicating a high degree of agreement of opinions. The results show that distance education can be used to assist teachers to acquire their didactic-professional needs related to OBE.

6.4.1.4 Difference between identified groups of respondents

The following scale was used in tables 6.29, 6.30, 6.31, 6.32, 6.33, 6.34, 6.35, 6.38, 6.40 and 6.41:

- 1 = Definitely
- 2= In many areas
- 3= In few areas
- 4 = Definitely not

In tables 6.36, 6.37, 6.39 and 6.42 the following scale was used:

- 1 = Very frequently occurs
- 2= Often occurs
- 3= Sometimes occurs
- 4= Rarely occurs

- *Difference regarding teachers' needs.*

The following key was used to indicate teachers' academic qualification:

Group 1 = Std 10 plus diploma or certificate (154)

Group 2 = B degree (68)

Group 3 = BEd / Honours (75)

Group 4= Advanced degree (8)

Table 6.29: Relationship between teachers' academic qualifications and teachers' needs

Item	Mean of group 3	Mean of group 4	Root MSE of ANOVA	p value	Effect Size d-value
Outcomes and methods of achieving them	1.89	1.54	0.60	0.03	0.6

Table 6.29 shows that there is a difference with medium effect between the responses of respondents in groups 3 and 4 (respondents with BEd / Honours and respondents with advanced degrees) . The differences could be due to the levels of academic training the two groups received. Respondents with

advanced degrees received more academic training than respondents with BEd / Honours degrees but because of small number of respondents in group 4 one must be careful in generalising any trend regarding the group in this table.

The following key was used to indicate teaching experience of teachers:

Group 1 = 0- 5 years (N = 36)

Group 2 = 6-10 years (N = 47)

Group 3 = 11-15 years (N = 117)

Group 4 = 16-20 years (N = 62)

Group 5 = 21+ years (N = 40)

Table 6.30: The relationship between teachers' experience and teachers' needs

	Teachers with less than five years experience (Group 1)	Teachers with more than five years experience (second group)			Effect size
Item	Mean	Mean	Root MSE	p- value	d-value
Learning strategies centering around learners' activities (groups 1 & 3)	2.06	1.78	0.59	0.06	0.5
Learning strategies centering around learners' activities(groups 1 & 4)	2.06	1.76	0.59	0.06	0.5
Outcomes and methods of achieving the outcomes (groups 1 & 5)	2.59	2.07	0.83	0.04	0.6

Table 6.30 shows that there is a difference with medium practical significant effect in these three items. Respondents with less than five years experience view the three items not as important as those with more than five years experience. This trend might be due to the fact that respondents with less than five years experience could still be regarding the training they received in tertiary institution as sufficient for them to be able to teach in the OBE classroom.

The following key was used to indicate teachers' professional qualifications:

Group 1 = PTC and SPTC (N= 4)

Group 2 = JSTC (N=37)

Group 3 = STD (N = 106)

Group 4 = UED/ HED (N = 56)

Group 5 = Integrated degree (N = 6)

Table. 6.31: Relationship between professional qualifications and teachers' needs in respect of learning strategies centering around learners' activities

Groups compared	Mean of first group	Mean of second group	Root MSE of ANOVA	p	Effect size (d)
Groups 1 & 5	1.52	2.21	0.83	< 0.05	0.8
Groups 2 & 5	1.73	2.21	0.83	< 0.05	0.6
Groups 4 & 5	1.82	2.21	0.83	< 0.05	0.5

Table 6.31 shows that there is a difference with medium practical significant effect between the responses of teachers in groups 2 and 5, and 4 and 5 in the item learning strategies centering around learner's activities. The first mentioned groups in groups 2 and 5 and 4 and 5 on a practically significant level show the more urgent needs in this table. The difference could be due to the duration of their pre-service training. Respondents in group 2 received 2 years professional training while teachers in groups 4 and 5 received 1 year

and 4 years professional training respectively . Table 6.31. also shows that there is a difference with large effect between the responses of teachers in groups 1 and 5 in the item learning strategies centering around learners activities. The first group mentioned in groups 1 and 5 on a practically significant level shows the more urgent need in this table. Again here the difference could be due to either the duration or focus of the pre-service training, or both. Teachers in group 1 received 2 years pre-service training for the primary school while teachers in groups 5 received 4 years pre-service training for the secondary school. In view of small numbers in groups 1 and 5 one should be careful to generalize any trend regarding those groups from the data in this table.

Table 6.32 Relationship between professional qualifications and teachers' in respect of learner centred assessment strategies

Groups compared	Mean of the first group	Mean of the second group	Root MSE of ANOVA	p	Effect size (d)
Groups 1 & 2	1.53	1.91	0.64	0.03	0.6
Groups 1 & 3	1.53	1.91	0.64	0.03	0.6
Groups 1 & 4	1.53	2.06	0.64	0.03	0.8
Groups 1 & 5	1.53	2.34	0.64	0.03	1.3
Groups 2 & 5	1.91	2.34	0.64	0.03	0.7
Groups 3 & 5	1.91	2.34	0.64	0.03	0.7

Table 6.32 shows that there is a difference with medium practical significant effect between the responses of teachers in groups 1 and 2 , 1 and 3, 2 and 5,

and 3 and 5 in the item learner-centred assessment strategies. The first mentioned groups in groups 1 and 2, 1 and 3, 2 and 5, and 3 and 5 on a practically significant level show the more urgent needs in this table. The difference could be due to the duration of their pre-service training. Respondents in group 1 received 2 years pre-service training for the primary school while respondents in groups 2 received 2 years pre-service training for the junior secondary school. Respondents in groups 3 and 5 received 3 years and 4 years pre-service training for the secondary school respectively. Table 6.32 also shows that there is a difference with large effect between the responses of respondents in groups 1 and 4, and 1 and 5 in the item learner – centred assessment strategies. The first mentioned group on a practically significant level shows a more urgent need than the second mentioned group. The difference could be due to either the duration or focus of their pre-service training, or both. In view of the small numbers in groups 1 and 5 one should be careful to generalize any trend regarding those groups from the data in their table.

Table 6.33. Relationship between professional qualifications and teachers' needs

Item	Mean of group 2	Mean of group 3	Root MSE of ANOVA	p	Effect Size (d)
Educator-centred teaching and assessment strategies	1.88	1.92	0.83	< 0.01	0.5

Table 6.33. shows that there is a difference with medium practical significant effect between the responses of teacher in groups 2 and 3. The first mentioned group shows more urgent needs than the second mentioned group. The

difference could be due to the focus or duration of their pre-service training, or both.

- *Differences regarding the role of students' counselling and tutors in distance education.*

Here are the results where only distance learners were used.

The following key was used to indicate teachers academic qualifications:

Group 1 = std 10 plus diploma or certificate (58)

Group 2 = B. degree (68)

Group 3 = B. Ed / honours (75)

Group 4 = Advanced degree (8)

Table 6.34. Relationship between academic qualifications and teachers' responses regarding the role of student counselling and tutoring

Item	Mean of group 1	Mean of group 3	Root MSE of ANOVA	p	Effect size (d)
Preparation for study	1.86	2.17	0.67	0.06	0.5

Table 6.34 shows that there is a difference with medium practical significant effect between the responses of respondents in groups 1 and 3 (respondents with Std 10 plus diploma or certificate as their highest academic qualifications and those with BEd/ Honours) in the item. The difference could have been caused by levels of academic training the groups received. Respondents with

BEd / Honours received more academic training than teachers with Std 10 plus diploma or certificate.

The following key was used to indicate teachers' professional qualifications:

Group 1 = PTC and SPTC (N =4)

Group 2 = JSTC (N= 37)

Group 3 = STD (N = 106)

Group 4 = UED/ HED (N = 56)

Group 5 = Integrated degree (N = 6)

Table 6.35: Relationship between respondents' professional qualifications and their responses regarding the role of student counselling and tutoring

Item	Mean of group 2	Mean of group 4	Root MSE of ANOVA	p	Effect size (d)
Counselling	1.80	2.10	0.66	0.09	0.5

There is a difference with medium practical significant effect between the responses of respondents in groups 2 and 4 (respondents with JSTC as their professional qualification and those with UED/ HED) in the item. The difference could be due to the duration of training the two groups received. Respondents with JSTC received two years professional training while respondents with UED/HED received one year professional training.

- *Difference in response regarding the opportunities of student counselling and tutorial lessons in distance education.*

Here are the results where only distance learners were used.

The following key was used:

Group 1 = 0-5 years (N = 18)

Group 2 = 6-10 years (N = 34)

Group 3 = 11-15 years (N = 75)

Group 4 = 16-20 years (N = 53)

Group 5 = 21⁺ years (N = 26)

Table 6.36: Relationship between teachers' experience and their responses regarding opportunities for student counselling and tutorial lessons in distance education

Item	Mean of the first group	Mean of the second group	Root MSE	p	d
Counselling (groups 3 & 4)	2.84	2.47	0.80	<0.01	0.5
Counselling (groups 4 & 5)	2.47	3.08	0.80	<0.01	0.8

Table 6.36 shows that there is a difference with medium practical significant effect between the responses of the two groups in the first item. The mean of respondents with 11-15 years experience is close to 3 (sometimes occurs) while the mean of teachers with 16-20 years experience is close to 2 (often occurs). Table 6.36 also shows that there is a practical significant difference between the responses of respondents with 16-20 years experience and teachers with 21⁺ years experience in the second item. The mean of respondents with 16-20 years experience is close to 2 (often occurs) while that of teachers with 21⁺ years experience is close to 3 (sometimes occurs). Respondents with 16-20 years experience seem to be more dependent on counselling in distance education than respondents with less than 16 or more than twenty years.

The following key was used to indicate teachers' professional qualifications in table 6.37:

Group 1 = PTC and SPTC (N = 4)

Group 2 = JSTC (N = 37)

Group 3 = STD (N = 106)

Group 4 = UED / HED (N = 56)

Group 5 = Integrated degree (N = 6)

Table 6.37: Relationship between teachers' professional qualifications and their responses regarding opportunities of student counselling and tutorial lessons in distance education

Item	Mean of the first group	Mean of the second group	Root MSE	p	Effect size (d)
Preparation for study (groups 1 & 3)	1.95	2.63	0,76	<0.01	0.9
Preparation for study (groups 1 & 4)	1.95	2.49	0,76	<0.01	0.7
Preparation for study (groups 2 & 3)	2.26	2.63	0,76	<0.01	0.5
Preparation for study (groups 2 & 5)	2.26	1.80	0,76	<0.01	0.6
Preparation for study (groups 3 & 5)	2.63	1.80	0,76	<0.01	1.1
Preparation for study (groups 4 & 5)	2.49	1.80	0.76	<0.01	0.9

There is a difference with medium practical significant effect between the responses of teachers in groups 1 and 4, 2 and 3 and 2 and 5 in the item. The difference could be due to the duration of professional training the respondents received. Respondents in groups 1 and 2 have been trained professionally for

two years while those in groups 3 , 4 and 5 have been trained for 3 years, 1 year and 4 years respectively. Table 6.35 also show that there is a difference with large effect between the responses of respondents in groups 1 and 3, 3 and 5, and 4 and 5 in the item. The same reason advanced above in this paragraph could also apply here.

- *Difference regarding distance education as a way to satisfy secondary school teachers' didactic professional needs.*

Here are the results where only distance learners were used.

The following key was used to indicate teachers' academic qualifications.

Group 1 = std 10 plus diploma or certificate (58)

Group 2 = B. degree (68)

Group 3 = B. Ed / honours (75)

Group 4 = Advanced degree (8)

Table 6.38 Relationship between academic qualifications and teachers' responses regarding distance education as a way to satisfy secondary school teachers' didactic-professional needs.

Item	Mean of the first group	Mean of the second group	Root MSE	p	Effect size (d)
Role of teachers (groups 2 & 3)	1.68	1.97	0.61	0.01	0.5
Role of teachers (groups 2 & 5)	1.97	1.45	0.61	0.01	0.9

Table 6.38 shows that there is a difference with medium effect between the responses of teachers in groups 2 and 3 (teachers with B degrees and teachers with BEd / Honours) in the item. The difference could be due to the levels of academic training the two groups have received. Teachers with BEd / Honours received more academic training than teachers with B degrees. Table 6.38 also shows that there is difference with large effect between the responses of teachers in groups 2 and 4 in the item. The difference could also be due to the levels of academic training the two groups have received. Taking into account the possible limitation due to small numbers in group 4, one should be careful to generalize any trends regarding the group from the data in this table.

- *Differences of responses regarding the opportunity for student counselling and tutorial lessons in distance education.*

Table 6.39: Teachers' desire to improve their professional qualifications and their responses regarding opportunities for student counselling and tutorial lessons in distance education

Item	Teacher with desire's Mean	Teacher without desire's Mean	Maximum standard diversion	p	d
Counselling	2,2.1	2.59	0.86	0.03	0.4

Table 6.39 shows that there is a difference with small effect between the responses of the two groups in the item. The effect size shows that this difference is of no practical significance between the responses of the two groups.

- Difference regarding teachers' and managers' needs.

Table 6.40: Difference in responses between teachers and managers regarding teachers' needs

Item	Teachers' Mean	Managers' Mean	Maximum standard deviation	p	Effect size (d)
Learner performance assessment strategies	1.92	1.86	0.70	0.07	0.1

A difference of statistical significance occurred between the responses of teachers and managers. However, the effect size shows that differences are of no practical significance in respect of the following factor:

- Learners performance assessing strategies.

Table 6.41: Teachers' desire to improve their academic qualifications through distance education and their responses regarding teachers' needs related to OBE

Item	Mean of respondents with desire	Mean of respondents with no desire	Maximum standard deviation	p	Effect size (d)
Learning strategies centering around learners' activities	1.83	2.15	0.65	0.05	0.5
Learner-centred assessment strategies	1.95	2.27	0.69	0.08	0.5
Outcomes and methods of achieving them	1.73	2.10	0.71	0.04	0.5
Learner-centred teaching strategies	1.85	2.16	0.67	0.02	0.5

Table 6.41 shows that there is a difference with medium effect in the four items between the teachers with the desire to improve their academic qualifications and those with no desire to improve their academic qualifications. The mean of the groups with desire is lower and close to 2 (in many areas) while that of the group with no desire are above and close to 2 (in many areas). Respondents with

a desire to improve their academic qualifications seem to be somewhat more aware of their needs than those without that desire.

- *Difference regarding the opportunity for student counselling and tutorial lessons in distance education.*

Table 6.42: Teachers' desire to improve their professional qualifications through distance education and their responses regarding opportunities for student counselling and tutorial lessons in distance education

Item	Mean of respondents with desire	Mean of respondents with no desire	Maximum standard deviation	p	Effect size (d)
Counselling	2,21	2.59	0.86	0.02	0.4

Table 6.42: shows that there is a statistical significant difference with small effect between the responses of the two groups in the item which means that practically there is no difference between the responses of the two groups.

Summary of findings in respect of group differences.

The following are findings in respect of group differences:

The differences in tables 6.29, 6.34 and 6.38 could be due to the levels of academic training the groups have received. Respondents with less than five years experience view the three items in table 6.30 as not so important as those with more than five years experience do. This trend might be due to the fact that teachers with less than five years experience could still be regarding the training they have received at the tertiary institution as enough for them to be able to adapt to teach in an OBE classroom.

In tables 6.31, 6.32, 6.33, 6.35 and 6.37 the differences could be due to either the duration or focus of pre-service training the teachers have received, or both.

Respondents with 16-20 years experience seem to be more dependant on counselling in distance education than respondents with less than 16 or more than 20 years.

Tables 6.39, 6.41 and 6.42 show that although there is a statistically significant difference between the responses of the two groups in the items, this difference is of small effect which means that practically there is no difference.

Respondents with the desire to improve their academic qualification seem to be somewhat aware of their needs more so than those without that desire.

6.4.2 What is lacking in current distance education based on print?

An open-ended question on what is lacking in distance education based on print was given to the respondents. The following were responses of 148 respondents who are involved in distance education:

61 (41.2%) felt that there are few or no tutorial lessons.

38 (25.7%) felt that there is little or no time for experiments and demonstrations in courses that need them.

28 (18.9%) felt that counselling in general receives little or no attention.

10 (6.8%) felt that nothing is lacking in distance education based on print.

10 (6.8%) were unsure about what is lacking in distance education.

1 (0.7%) felt that the method of assessment is channelled only through assignments and examinations.

This implies that the time allocated for counselling and tutorial lessons need to be increased. Secondly, practical tasks such as experiments and demonstrations need to be done in courses that need them.

6.4.3 The most positive aspects of distance education based on print

Respondents were given an open-ended question on the most positive aspects of distance education based on print. The following were responses of 142 respondents:

51 (36.9%) felt that distance learners study while they are at their respective homes and working.

23 (16.2%) felt that the learning content is clear and to the point.

16 (11.3%) felt that distance education is accessible to each and every learner.

13 (9.2%) felt that distance education saves time and can be convenient as there are no demands for contact sessions.

13 (9.2%) felt that distance learners study at their own pace.

9 (6.3%) felt that family life is not disrupted by distance education.

5 (3.5%) felt that one can improve his or her academic and professional qualifications like full-time students.

4 (2.8%) felt that distance education is cheaper when compared to full-time studies.

4 (2.8%) were unclear as far as the most positive aspect of distance education was concerned.

2 (1.4%) felt that distance education enables teachers to be life-long learners.

1 (0.7%) felt that it enables teachers to be learning-area specialists.

1 (0.7%) felt that there is no positive aspect to distance education.

Respondents reported potential matters instead of actual matters. What is most positive to them are things that are not actually happening in the offering of

distance education courses. The most positive aspects of distance education according to respondents are accessibility, studying while one is at home and working and making teachers learning-area or subject specialists. What teachers say here complies with the reasons why distance education was considered to improve academic qualifications given before (*cf*, 6.3.1.11).

6.4.4 Preferences of other ways of distance education

An open-ended question was given to the respondents on preferences of other ways of distance education. The following are responses of 169 respondents who responded to the item:

116 (68.6%) preferred distance education based on print because other forms are more expensive.

23 (13.6%) preferred computer-aided distance education.

21 (12.4%) preferred both TV and computer-aided distance education.

7 (4.9%) preferred TV-aided distance education.

2 (1.2%) preferred cassettes for taperecorder-aided distance education.

The above suggests that distance education based on print was preferred because of its accessibility and affordability compared to other forms of distance education. Distance education should be supplemented by modern information communication technology in order to assist distance learners .

6.4.5 Additional Information

Respondents were also given a open-ended question on which they were requested to make some additions as far as distance education is concerned. The following were additions made by 22 respondents:

13 (59.1%) felt that contact sessions with tutors need to be done at least once every quarter.

4 (18.2%) felt that audio-visual cassettes need to be used where possible.

2 (0.1%) felt that there should be a service centre near distance learners for easier contact.

1 (4.5%) felt that distance learners need to be assisted in choosing the relevant fields of study.

1 (4.5%) felt that more tutors are needed to conduct tutorial lessons.

1 (0,5%) felt that there must be adequate in-course counselling.

This implies that service centres should be near distance learners and more tutors need to be employed to conduct tutorial lessons quarterly . Distance learners should also have access to counselling.

6.4.6 Summary of group responses

It is valid to work with the identified factors instead of with separate items.

In all nine factors in category I the means are close to 2 (in many areas) with a high degree of agreement of opinions. The above suggests that respondents need all the identified didactic-professional needs related to OBE.

Category II shows that in both factors the means are approximately 2 (in many areas) with a high degree of agreement. The above implies that distance learners, in this case teachers, need to be given enough support in the form of counselling.

In category III the means are close to 3 (sometimes occurs), indicating that respondents are high in agreement that preparation for study and counselling sometimes occurs in distance education.

Category IV shows that in the two identified factors the means are close to 2 (in many areas), indicating a high degree of agreement of opinions. The results show that distance education can be used to assist respondents to fulfill their didactic-professional needs related to OBE.

The difference in tables 6.29, 6.34 and 6.38 could be due to the levels of academic training the groups received.

The difference in table 6.30 could be due to a difference in experience. Respondents with less than five years experience view the three items in table 6.30 as not as important as those with more than five years experience do. The trend might be due to the fact that respondents with less than five years experience could still be regarding the training they received in the tertiary institution as enough for them to be able to adapt to teach in an OBE classroom.

In tables 6.31, 6.32, 6.33, 6.35 and 6.37 the differences could be due to either the duration or focus of pre-service training the respondents have received, or both.

Respondents with 16 – 20 years experience seem to be more dependent on counselling in distance education than respondents with less than 16 or more than 20 years.

Tables 6.39, 6.41 and 6.42 show that although there is a statistically significant difference between the responses of the two groups in the items, this difference is of small effect which means that practically there is no difference.

Respondents with the desire to improve their academic qualifications seem to be somewhat aware of their needs, more so than those without this desire.

Time allocation for counselling and tutorial lessons needs to be increased. Practical tasks such as experiments and demonstrations should be done in courses that need them.

The most positive aspects of distance education based on print are accessibility, studying while one is at home and working and making teachers learning-area or subject specialists.

Respondents preferred distance education based on print because of its accessibility and affordability compared to other forms of distance education.

6.5 RESPONSES OF EXPERTS OF DISTANCE EDUCATION AND TEACHERS CURRENTLY STUDYING THROUGH DISTANCE EDUCATION ON THE ROLE OF DISTANCE EDUCATION IN SATISFYING TEACHERS' DIDACTIC PROFESSIONAL NEEDS

6.5.1 Orientation

Structured discussions with distance education specialists and interviews with teachers who are studying through distance education were conducted to gather information about distance education based on print (*cf.* appendices). Convenience sampling was used to select teachers. Purposive sampling was used for the experts. This section starts by giving responses for the discussions of the experts, followed by responses for the interview schedule of teachers currently studying through distance education. Two programmes of distance education that were prominent at the time of survey in that region are discussed.

Programme A is a programme where a contracted agent is administers distance education on behalf of a traditional residential university. Programme B is a programme offered by a distance education university directly to the students. Structured discussions were held with experts involved with both programmes A and B.

6.5.2 Responses of experts

Question 1: What are the criteria for one to become a student counsellor?

In order for one to become a student counsellor, according to Scott (2003), one needs to have a sound knowledge of teaching and learning and a positive

emphatic personality. In addition, one needs to have studied psychology of education or have a degree in counselling (Klopper, 2003; Venter, 2003). The above may, amongst others, enable the student counsellor to satisfy the needs of distance learners.

Question 2: For what purpose is counselling done?

Klopper (2003), Scott (2003) and Venter (2003) see the purpose of counselling as that of preventing learning problems, remediating learning problems and motivating students. Through counselling the stumbling blocks encountered by distance learners may be removed.

Question 3: What are the requirements for successful counselling?

Scott (2003) regards the accessibility of student counsellors to distance learners as one of the requirements. This suggests that distance learners need to be assisted whenever they need help from the student counsellors. In addition, Venter (2003) maintains that a student counsellor needs to be someone who is interested in helping people or someone who wants to be involved with other people's problems.

Question 4: To what extent are these requirements for successful counselling taken into consideration in different institutions?

According to Scott (2003), the above-mentioned requirements under question 3 are taken care of by phone, e-mail as well as personal contact. The way these requirements are taken into consideration is not enough to assist distance learners (Scott, 2003). The other experts did not respond to this item.

Question 5: To what degree are the following activities of student counselling taken into consideration in your institution to assist distance learners? Substantiate your answers.

The interpretation of the responses is as follows:

- **Study orientation and induction**

In programme A agents are not involved with study orientation and induction (Van Deemter, 2004). This is the work of traditional residential universities on behalf of which distance education is being administrated by agents (Van Deemter, 2004). Distance learners in this programme might not be orientated and inducted to study as they usually register at the agents and not at the traditional residential university where study orientation and induction are conducted. In all tutorial letters in programme B students get the names of staff members who could assist them in the various centres throughout the country (Venter, 2004). Transport problems to these centres might be the cause of distance learners not going to these centres for orientation and induction programmes.

- **Analysis of study problems and strategies for success when repeating courses**

In programme A agents are not involved with an analysis of study problems and strategies for success when repeating courses (Van Deemter, 2004). This is done by traditional residential universities on behalf of which distance education is administrated (Van Deemter, 2004). The above suggests that instead of distance learners getting assistance from the agents, they are referred to staff members at traditional residential university themselves. An analysis of study problems and strategies for success when repeating courses in programme B could be done by making an appointment with staff members and seeing them with the individual's specific problem (Venter, 2003). Financial constraints could play a role in preventing distance learners to visit the institution of distance education as the regional centre of programme B is far from the Venda region of the Limpopo Province.

- **Training in reading skills**

In programme A training in reading skills is offered by the universities themselves (Scott, 2003). However, distance learners in programme A might not find it easy

to get training in reading skills. Venter (2003) maintains that in programme B there are courses for reading skills that distance learners can attend. Distance learners might not be attending them because of financial constraints mentioned in the paragraph above.

- **Preparation for examinations**

In programme A, according to Scott (2003), interactive study guides of traditional residential universities offer such help. In programme B there are brochures printed to help students prepare for exams and students are welcome to see the academic staff concerning exams and exam preparation (Venter, 2003).

- **Pre-course counselling**

In programme A, agents are not involved with pre-course counselling as this falls within the ambit and responsibility of the relevant traditional residential universities (Van Deemter, 2004). The above suggests that, whenever distance learners need pre-course counselling, they are referred by agents to the institution concerned. In programme B there is special administrative staff giving advice about courses for under- and post-graduate students (Venter, 2003).

- **In-course counselling**

According to Klopper (2003) and Scott (2003), students in programme A are advised to contact counsellors in the traditional residential universities when problems are experienced. Contact numbers of counsellors are given by agents to distance learners with study problems (Scott, 2003). The programme might not be succeeding because of financial constraints. In programme B, according to Venter (2003), there is special administrative staff to give advice about courses for under- and post-graduate students.

- **Post-course counselling**

Agents are not involved with post-course counselling in programme A (Van Deemter, 2004). This implies that distance learners in programme A are referred

to the institution concerned to get post-course counselling. In programme B post-course counselling is done by special administrative staff (Venter, 2003).

Question 6: How can student counselling be improved in your institutions?

According to Scott (2003), counselling in programme A needs to be offered at learning centres which at present seem to be not existing for distance learners. The process may minimise the cost of transport to distance learners. The respondent from programme B did not respond.

Question 7: Do you want to add anything regarding student counselling?

Often facilitators in programme A are not doing enough student counselling and also are not responding appropriately to student problems (Scott, 2003). In addition, Scott (2003) maintains that distance students are probably not knowledgeable about help offered by traditional residential universities. They may somehow be aware of help they may get at these universities. The respondent from programme B did not respond to this item.

Question 8: What are the criteria for one to become a tutor?

According to Scott (2003) and Venter (2003), in order for one to become a tutor, one needs to be an expert in the course that is tutored. Specialised didactical skills such as teaching skills are also required to ensure effective tutoring (Bothma, 2003). In addition, the tutor needs to have good communication skills (Klopper, 2003).

Question 9: How do tutors address general problems encountered by learners regarding content during the tutoring process?

Various ways of dealing with problems encountered by learners regarding learning content during the tutoring process have been given. Bothma (2003), for example, maintains that problems are addressed during discussions since there is not sufficient time to handle these in detail. The tutor may identify such

problems and discuss them with the group as a whole (Scott, 2003). The above suggests that tutors may make the identified problems the focus of a discussion session. Klopper (2003) also maintains that tutors may help learners to find answers in the textbooks or refer them to the lecturers in institutions offering distance education, or traditional residential universities on behalf of which distance education is administered by agents.

Question 10: What method is used by tutors to address problems of each and every individual learner?

According to Scott (2003) and Bothma (2003), tutors in programme A may have one-on-one contact by phone, e-mail or personal contact after meetings. Distance learners with problems in programme B may make an appointment with tutors (Venter, 2003; Bothma, 2003).

Question 11: How could access to competent tutors by students be of assistance to students?

Different views have been given on this aspect. Venter (2003) sees access to competent tutors as help to distance learners because distance learners often do not know whether they are on the right track. Problems can be solved immediately before they become a major issue through the process of access to competent tutors (Scott, 2003). In addition, Bothma (2003) and Klopper (2003) maintain that competent tutors can provide guidance and the necessary motivation to support learners in their academic endeavours.

Question 12: In what ways could the discussion between tutors and a group of distance learners compromise attention to an individual student?

Bothma (2003) maintains that individual students might become “invisible” in a group. Shy distance learners may not be involved in the group discussion. Individual problems might be neglected if it is merely a group discussion (Venter, 2003). The above suggests that some distance learners may fail to raise their

problems because of their shyness. These problems might also not be discussed in fine detail in a group (Venter, 2003).

Question 13: How can the problem in 12 above be addressed?

According to Scott (2003), tutors need to address each member in a group in the tutorial lessons. The above suggests that each member of a group needs to have equal chances of answering the tutors' questions. General problems need to be discussed in a group, but individuals need to make individual appointments to discuss particular problems (Venter, 2003). Tutors need to ensure that discussions take place in smaller, diverse groups to enable every student to participate (Venter, 2003).

Question 14: To what extent is social interaction between distance learners during tutorial lessons of assistance to them?

Bothma (2003), Scott (2003) and Venter (2003) maintain that social interaction may help students to build relationships during tutorials and to ensure peer assistance during subsequent study efforts. Distance learners could share information, look at each others' assignments and maybe discuss exam questions (Venter, 2003).

Question 15: How can the tutor address shyness of students which may inhibit dialogue in some groups?

In order to address shyness, Bothma (2003) maintains that tutors need to determine the strengths and weaknesses of the students in a group and focus on their strength and encourage them to demonstrate these strengths. This might not be possible because of the limited time tutors have with distance learners. Group discussion may also assist in addressing shyness (Klopper, 2003).

Question 16: In what way could tutoring be implemented to address secondary school teachers' needs related to outcome-based education?

According to Venter (2003), needs of teachers related to OBE may be addressed during tutorial lessons in their holiday times and over weekends. Currently two types of programmes of distance education should not only focus on the knowledge aspect of distance learners, but also on skills, dispositions and values (Meyer, 2004; Sichabu, 2005).

Tutorials can be applied to smaller groups which means more individual attention to every learner (Bothma, 2003).

Question 17: Would you like to add anything regarding tutoring in distance education?

According to Scott (2003), tutors need to be academically well qualified, have experience and be willing to assist distance learners who need to be tutored. Tutors need also be given a manual stipulating the nature of tutoring, be in regular contact with the academic staff who developed the material and maybe academic staff could provide them with more information (Scott, 2003). The above is supported by Meyer (2004) who maintains that contact sessions of distance learners with lecturers, particularly in programme A, are inadequate.

6.5.3 Responses of teachers currently studying through distance education

6.5.3.1 Orientation

The first six items give the responses of distance learners on student counselling. The last ten items give the responses of distance learners on tutoring.

Question 1: What is student counselling?

Various definitions of student counselling have been given. All of them regard student counselling as an assistance given to distance learners by student counsellors. Madzunya (2003) and Masindi (2003), for example, see it as an advice service that distance learners receive at colleges and universities. Ramalivhana (2003) defines student counselling as a service to the students, particularly those students who have problems in their studies. I.P. Demana (2003) sees it as an act of exchanging ideas between student counsellors and distance learners. Dangale (2003) sees it as the way in which students are guided on which course to study. T.G. Demana (2003) sees it as a process whereby students are helped to cope with the academic and social life issues that, if not properly handled, can destroy the future of distance learners. Itani (2003) regards student counselling as a contact session where distance learners are taught to write assignments or to be cleared on the topic that is important to the examination. Nembilwi (2003) defines student counselling as the emotional, psychological and physiological assistance offered to registered students.

Question 2: In what way do you benefit from counselling?

According to Dangale (2003), Itani (2003), Madzunya (2003) and Ramalivhana (2003), student counselling assists distance learners in the selection of courses and in the selection of methods of learning. Distance learners can be advised socially, physically, intellectually and cognitively (T.G.Demana, 2003). In addition, Nembilwi (2003) maintains that student counselling removes fears, instills responsibility and prepares distance learners for the rough or smooth of the road ahead.

Question 3: How often is counselling conducted at the Institution at which you are learning?

Dangale (2003), Itani (2003), Ramalivhana (2003) and I.P. Demana (2003) maintain that in programme A student counselling is rarely done. Madzunya (2003), T.G. Demana (2003) and Nembilwi (2003) maintain that counselling

programmes in programme B stretch from the beginning of the year to the beginning of the last quarter through appointment. According to Ramutumbu (2003), in programme B one gets counselled when one has made an appointment with lecturers or sometimes during group discussion. Distance learners are probably not knowledgeable about help offered at the institutions offering distance education (cf, 6.5.2.7).

Question 4: In what way do you benefit from activities of student counselling?

- Study orientation and induction

Students learn methods of studying and how to use university facilities such as the library (Dangale, 2003; Ramalivhana, 2003). Madzunya (2003) and Nembilwi (2003) maintain that study orientation and induction help learners to choose the right field of study. Itani (2003) maintains that at the institution where he is studying, study orientation and induction are done through paper work such as how to write assignments. It seems as if study orientation and induction are receiving little attention as distance learners in programme A enroll through agents that, according to Van Deemter (2004), are not involved in student counselling while those in programme B might be unable to visit the centre of the institution due to financial constraints.

- Analysis of study problems and strategies for success when repeating courses

An analysis of study problems and strategies for success when repeating courses provides distance learners with an opportunity on how to overcome some of their learning barriers (Ramalivhana, 2003). Ramutumbu (2003) maintains that students are given procedures that they should follow when answering questions. Distance learners are shown the correct study methods in order to succeed (Nembilwi, 2003). According to Madzunya (2003), the above process motivates distance learners in their studies. Chances of their passing increase through these process (Dangale, 2003; Pharamela, 2003). In both

identified programmes it seems as if more still needs to be done to improve the present situation as at present the above is done by making appointments with staff members of traditional residential universities and distance education universities.

- **Training in reading skills**

Ramutumbu (2003), Ramalivhana (2003), Dangale (2003), Madzunya (2003) and Pharamela (2003) maintain that training in reading skills helps distance learners to know how to deal with large amounts of reading material. Chances of passing the examination could be improved through this process (Nebwilwi 2003). Itani, (2003) maintains that in the institution through which he is studying there is no such training. It has been stated in the responses of experts (*cf*, 6.5.2) that it seems as if distance learners do not find it easy to get training in reading skills.

- **Preparation for examination**

Distance learners are shown the wise way of budgeting time in their preparation for examination (T.G. Demana, 2003). In addition, learners may be given an indication of what to expect in the exam (Itani, 2003). The process increases chances of the passing for distance learners (Dangale, 2003). Distance learners may be shown right approaches of answering questions in the examination. Stress may be prevented when preparing for examination (Ramalivhana, 2003: Pharamela, 2003).

- **Pre-course counselling**

T.G. Demana (2003) and Nebilwi (2003) are of the opinion that pre-course counselling enables distance learners to make a wise choice of their learning fields. More knowledge about the course distance learners want to study is gained (Dangale, 2003). In addition, according to Madzunya (2003), distance learners are shown methods that enable them to study the learning material well. I.P. Demana (2003) and Itani (2003) maintain that in the institutions where they are at present studying, it is never done. It seems as if pre-course counselling is

not receiving enough attention as distance learners in programme A are enrolling through agents that, according to Van Deemter (2004), are not involved with counselling, while those in programme B do not know whether or not the institution offers pre-course counselling.

- **In-course counselling**

According to Dangale (2003) and Madzunye (2003), in-course counselling enhances one's level of studying. Learners may be persuaded to visit the library regularly and to write assignments through in-course counselling (Ramalivhana, 2003). The learners' level of understanding may be made easier by in-course counselling.

- **Post-course counselling**

In post-course counselling the counsellor acts as a guide, mentor and inspirer (T.G. Demana, 2003). After passing their field of studies, learners may be advised on how to market themselves (Ramalivhana, 2003). Madzunye (2003) maintains that the learner may be encouraged to do senior degrees. Other respondents know nothing about post-course counselling. The number of respondents who know nothing about post-course counselling suggests that post-course counselling receives little attention.

Question 5: What needs to be done to improve student counselling?

Madzunye (2003) maintains that counselling should be conducted by suitable people who are skilled in this field. In addition, according to Dangale (2003), T.G. Demana (2003) and Nembilwi (2003), counselling must be compulsory for all distance learners. According to Ramutumbu (2003), each distance learner needs to attend pre-course counselling in order to be assisted with the selection of courses.

Question 6: Do you want to add anything regarding student counselling in the institution at which you are studying?

According to Madzunya (2003), programmes for student counselling should be known by each and every student. Programmes of counselling should enable all distance learners to benefit (Madzunya, 2003; Pharamela, 2003). Counselling staff members need to be efficient in the field of psychology or the psychology of education (Ramalivhana, 2003).

Question 7: Who are tutors?

Various definitions of tutors have been given. All these definitions point to tutors as people who teach or assist learners in tutorial lessons. Dangale (2003), for example, sees tutors as people who teach students during tutorial lessons. I.P. Demana (2003), Madzunya (2003) and Ramalivhana (2003) see tutors as students who give lessons to their fellow students. According to Masindi (2003), a tutor can be a teacher or any other person who directs the studies of a number of students whom he also meets separately. Itani (2003) maintains that tutors may be employed temporarily for different courses in different institutions. Tutors may be lecturers, deans or professors (Nembilwi 2003; Ramutumbu 2003). T.G. Demana (2003) defines a tutor as an instructor, a guide and motivator who promotes the learning process.

Question 8: In what ways do you benefit from the manner in which general problems are addressed during tutorial lessons?

According to Dangale (2003), distance learners may benefit by sharing ideas during tutorial lessons. Tutors enable distance learners to understand the content of their course (Ramalivhana, 2003). Furthermore, distance learners should not allow tutors to pass any aspect without requesting clarification (Madzunya, 2003; Itani, 2003). Nembilwi (2003) maintains that the process of addressing general problems in tutorial lessons enables distance learners to benefit from their studies.

Question 9: How are problems of individual learners related to the content addressed by tutors?

According to Dangale (2003) and Ramalivhana (2003), the principle of individualization is used to address problems of individual learners. Distance learners should be encouraged to see the tutors during their spare time. Furthermore, distance learners themselves may help each other in solving their problems (Madzunye, 2003). Some of the problems may be addressed in the tutorial lessons by tutors for the sake of other distance learners (I.P. Demana, 2003; Ramatumbu, 2003).

Question 10: How could access to competent tutors be of assistance to a learner?

Madzunye (2003) maintains that a competent tutor guides distance learners according to their needs. Distance learners, according to Nembilwi (2003) and Ramalivhana (2003), could get the most important advice regarding the study of learning content and how to write assignments. Competent tutors come with good strategies to highlight the problems distance learners encounter in their learning situation (Masindi, 2003). Distance learners' approach to learning content is broadened (I.P. Demana, 2003). In addition, Dangale (2003) maintains that competent tutors guide distance learners to exam-related matters. Their chances for succeeding in the exam could be improved by this process.

Question 11: In what ways could the discussion between a tutor and a group of learners be of disadvantage to a learner?

Individual problems may not be attended to effectively (Dangale, 2003). T.G. Demana (2003), Madzunye (2003) and Masindi (2003) also maintain that distance learners may lack co-operation in the tutorial lessons. Distance learners might feel discouraged since the tutors might not be experts in that field. The above is supported by Ramalivhana (2003) who says that when there is no trust

between tutors and learners and when tutors lack the relevant information, tutorial lessons degenerate.

Questions 12: What needs to be done to address the above?

Tutors need to master the content before they confront the student (T.G. Demana, 2003; Madzunye, 2003; Nembilwi, 2003; Ramalivhana, 2003). They must be able to guide distance learners in the learning of content in such a way that distance learners are attracted to their lessons (T.G. Demana, 2003). Itani (2003) also maintains that tutors need to be workshoped to be able to conduct tutorial lessons. In addition, according to Masindi (2003), the group should be composed of a small number of learners to enable tutors to pay attention to each of them. Learners with the same problems could be grouped together (Dangale, 2003; Ramutumbu, 2003).

Question 13: To what extent is social interaction between or amongst distance learners during tutorial lessons of assistance to the learner?

According to Dangale (2003) and Nembilwi (2003), chances of sharing ideas are increased. Social interaction could help to enhance co-operation between distance learners (Masindi, 2003). Learners could also realise that they are not the only ones with problems after listening to problems of other distance learners (I.P. Demana, 2003). Ramalivhana (2003) also maintains that the nature of interaction could help distance learners in the process of writing assignments.

Question 14: What needs to be done to address shyness of some distance learners which inhibits dialogue in some groups?

Masindi (2003) maintains that shyness could be addressed by encouraging respect towards each distance learner. Tutors need to strive to enhance co-operation between distance learners (Madzunye, 2003; Masindi, 2003). All distance learners need to be treated equally in groups by tutors (Ramalivhana, 2003). I.P. Demana (2003) also maintains that shy learners need to be

encouraged to speak and tutors need to make them realise that everybody is unique and that each one has his or her unique problems. Tutors need to make groups small and manageable, give tips on how one can be assertive without being aggressive and build up personal confidence (I.P. Demana 2003). In addition, Itani (2003) and Nembilwi (2003) maintain that distance learners need to be given tasks to prepare and present.

Question 15: In what way should tutoring be implemented to address secondary school teachers' needs related to outcomes-based education?

According to I.P. Demana (2003), tutoring needs to be done in groups. Tutoring needs to enhance distance learners' participation in discussions (Madzunye, 2003; Masindi, 2003). The learning groups need to comprise a limited number of students and tutors need to facilitate learning rather than spoon-feed distance learners (Itani, 2003; Ramalivhana, 2003). The learning in tutorial lessons need to have a bearing on life (I.P. Demana, 2003).

Question 16: Would you like to add anything regarding tutoring in distance education?

Itani (2003) and Madzunye (2003) maintain that experts of distance education need to workshop the tutors before letting them take tutorial lessons. Tutorial lessons need to be monitored regularly by lecturers (Ramalivhana, 2003). Furthermore, distance learners need to be encouraged to attend tutorial lessons (Dangale, 2003). Enough centres need to be allocated so that every distance learner can meet other distance learners without financial constraints (T.G. Demana, 2003).

6.6 CRITERIA AND GUIDELINES FOR IMPLEMENTING PRINT AS A MODE OF DISTANCE EDUCATION

6.6.1 Orientation

The current two types of programmes of print as a mode of distance education, particularly programme A, are not without some stumbling blocks that need to be removed in order for them to be attractive to distance learners. It can be stated from the responses of the respondents in the subsections above that many things need to be improved in order for them to serve change secondary school teachers into lifelong learners. Distance learners need counselling and tutoring to assist them in their act of learning (*cf*, 6.4.1.3). In programme A very little is done in the form of counselling and preparing distance learners for studying (*cf*, 6.5.2). The above could be the stumbling blocks that prevent distance learners IN PROGRAMME A from studying well. If more attention is paid to student counselling and tutorial lessons, distance education could assist in the improvement of the roles teachers may play in school activities (*cf*, 6.4.1.3).

It is stated under Question 1 directed to experts that counselling needs to be done by people who have studied psychology of education or have a degree in counselling . In programme A distance learners might fail to get the assistance of the above-mentioned people as they are found in traditional residential universities and not in the agents who are administering distance education on behalf of these universities. It is also stated under Question 3, directed to teachers who are currently studying through distance education, that in programme B one gets counselled by appointment. The above suggests that student counselling is not accessible in programme A and even less accessible in programme B .

Under Question 8 (*cf*, 6.5.2), which is directed to an experts, it is stated that in order for one to become a tutor one needs to be an expert in the course that is tutored. The above implies that distance learners in programme A are being indirectly deprived of the opportunity of getting the assistance from experts for

the courses they are doing, as this is done by people appointed by the universities and not by the agents that administer distance education on behalf of these universities (Van Deemter, 2004). It is also stated that in both programmes A and B there are few or no tutorial lessons (*cf*, 6.4.3).

There seems to be a lack of good communication between the students, the academic staff responsible for courses in programme A and the administrative agent. Consequently, to mention one effect, feedback that distance learners receive on their assignments from academic staff responsible for their courses does not seem to be effective. As a result the distance learners' preparations for examinations and their growth in the respective learning areas suffer.

The current distance education programme based on print in both programmes is not at the moment supplemented by modern technological aids in the region. Distance education based on print, however, needs to be supplemented by modern information communicating technological aids (*cf*, 6.4.5). Computers, TV and radio could assist in this regard.

The more urgent needs identified in this chapter (*cf*, 6.4.1.4) could be addressed by distance education based on print if both types of programmes take the above into consideration. Distance learners and teachers in particular, are beset by loneliness and a feeling of isolation which occur when they are confronted for the first time with a strange set of learning material and a teacherless study environment (*cf*, 4.2.5). In addition, the integration of study with family life is another problem faced by distance learners or to be specific, teachers (*cf*, 4.2.5). Even though one can never be prescriptive on how distance education based on print should be implemented to satisfy secondary school teachers' didactic-professional needs related to OBE, the following criteria may prove to be effective in the process of implementing distance education based on print:

- Pre-course counselling during the time of registration should be provided at the service centres to all distance learners.

- Regular in-course counselling should be available to all students at the services centres.
- Post-course counselling to deal with vocational guidance and possible delay in achieving a goal should be provided at the service centres.
- Regular tutoring should be provided at the service centres in all courses to all learners.
- Good communication between the students and the academic staff responsible for courses should exist.
- Distance education based on print should be supplemented by technological aids.

6.6.2 Pre-course counselling

It is stated in chapter 4 (*cf*, 4.4.4.2) that pre-course counselling identifies the most appropriate courses for a potential student. The above suggests that before teachers register for the academic professional courses in programmes of distance education, they should first be involved in pre-course counselling. It also implies that agents in programme A need to have student counsellors who can assist distance learners with pre-course counselling. It is also stated under question 6 (*cf*, 6.5.3.1) directed at teachers who are currently studying through distance education, that pre-course counselling should benefit all distance learners in both programmes A and B of distance education. Ways need to be found to enable professional-course counselling to be known by all learners. All learners need to be encouraged to attend pre-course counselling. Teachers in pre-course counselling are assisted to make a wise choice of their field of learning (*cf*, 6.5.3.1). It has been found in table 6.35 above (*cf*, 6.4.2.4) that counselling sometimes occurs in distance education. This suggests that pre-course counselling which is part of counselling is receiving little attention in both programmes A and B of distance education based on print.

6.6.3 In-course counselling

In-course counselling is offered to distance learners or teachers, in particular, already busy with distance education (*cf*, 4.4.4.3). In both programmes A and B of distance education teachers may be assisted to cope with pressure, examination preparation and examination anxiety. It has been found in table 6.35 (*cf*, 6.4.1.4) that counselling sometimes occurs or rarely occurs in distance education. In-course counselling, which is part of counselling, should be done regularly in both programmes A and B to enable distance learners or teachers in particular, to cope with what has been said above. It is stated in the above paragraph (*cf*, 6.6.2) that agents need to be afforded a chance of having student counsellors who could assist in counselling matters. Through this in-course counselling the problems of distance learners could be phased out.

6.6.4 Post-course counselling

It is stated in chapter 4 (*cf*, 4.4.4.4) that post-course counselling of distance learners deals with vocational guidance and a possible delay in achieving goals. Teachers who fail their examination at the end of the year in both programmes A and B of distance education may be encouraged to repeat the course or courses. It has been stated in the two paragraphs above that counselling sometimes occurs or rarely occurs. Programmes for post-course counselling should be made known to every student or teacher, in particular in both programmes of distance education. The above could encourage distance learners to become lifelong learners.

6.6.5 Tutoring

In chapter 4 (*cf*, 4.5.2) it is stated that tutoring needs to be a role for experts in the learning material that learners are learning. These experts may be people from the institution offering distance education or NGO's (*cf*, 4.5.2). Distance learners or teachers in particular, may benefit by sharing ideas during tutorial lessons. Through the principle of individualization the problem of individual

learners or teachers in particular, could be addressed by effective tutoring. It has also been stated in this chapter (*cf*, 6.4.3) that there are very few or no tutorial lessons in the present distance education programme based on print. Tutoring in both programmes of distance education needs to be done on a regular basis. Agents in programme A need to have their own tutors to assist distance learners. Enough centres need to be allocated to both programmes A and B so that every distance learner can meet other distance learners without financial constraints.

6.6.6 Good communication between the student and the academic staff responsible for courses

It is stated in 6.6.1 above that, particularly in programme A, there seems to be a lack of good communication between distance learners and academic staff responsible for the course. Lecturers at traditional residential universities need to be accessible to distance learners. They need to visit different centres established by agents to address problems faced by distance learners and distance learners need to be informed of their coming.

6.6.7 Supplementing distance education based on print by technological aids

It is also stated in 6.6.1 above that the current two programmes of distance education need to be supplemented by modern technological aids in order for them to be attractive to distance learners. Computers, TV, video cassettes and radio's could be of assistance in this regard.

6.6.8 A proposed structure for offering effective distance education

6.6.8.1 Orientation

Currently two types of programmes of distance education are mostly focused on the knowledge aspect of distance learners and not on skills, dispositions and values (*cf*, 6.5.2). The above suggests that their role towards satisfying the

needs of secondary school teachers related to OBE is not sufficient. Distance learners or teachers' growth in their respective learning areas suffer as a result of the above (*cf*, 6.6.1). One wonders whether the providers of distance education, particularly of programme A, want monetary gain or want to empower distance learners academically and professionally particularly in an OBE context. In order for distance learners following a course based on print to also focus on the development of skills of distance learners, the following, coming from the research findings, need to be considered:

- Regular contact sessions with lecturers
- Regular tutorial sessions
- Multimedia approach
- Counselling
- Assessment.

6.6.8.2 Regular contact sessions with lecturers

It is stated under Question 16 (*cf*, 6.5.3.1) directed at teachers currently studying through distance education, that more centres near distance learners need to be allocated so that every distance learner could regularly participate in sessions led by the relevant lecturers. It is stated under question 17 directed to experts that contact sessions of distance learners with lecturers, particularly in programme A, are inadequate (*cf*, 6.5.2). The contact sessions could take different forms (see 6.6.8.4). Notices for the dates on which lecturers will be conducting lessons need to be sent to distance learners. Lessons could be conducted via satellite transmission. These contact sessions could enable lecturers to assist distance learners on how to use the study guide together with the prescribed textbooks, how to prepare assignments, how to approach the questions in the examination and to explain the structure and content of courses.

6.6.8.3 Regular tutorial sessions

It is stated under Question 16 (*cf*, 6.5.3.1), directed at teachers currently studying through distance education based on print, that experts of distance education need to workshop the tutors before letting them conduct tutorial lessons. In addition, tutorial sessions need to follow up on each contact session of distance learners with lecturers (Meyer, 2004). Under Question 16 (*cf*, 6.5.2), directed to experts of distance education, it is stated that teachers' holiday times and weekends may be used for tutorial sessions. The above might enable distance learners or teachers in particular to gain skills that are needed in the world of work or, to be precise in the OBE way of teaching. Tutors may demonstrate what need to be demonstrated or to facilitate learners where necessary. Under Question 12 (*cf*, 6.5.3.1) directed at teachers currently studying through distance education, it is stated that the group in tutorial lessons needs to be composed of a small number of learners to enable tutors to pay undivided attention to every one of them. Distance learners' problems regarding assignments and learning content could be addressed through this process. Tutors need also to have regular contact with lecturers concerned in order to be familiar with what is expected of distance learners. Distance learners or teachers in particular may benefit by sharing ideas when tutors use co-operative learning strategies in the tutorial lessons (*cf*, 6.6.5).

6.6.8.4 Multi-media approach

Distance learners or teachers in particular have limited access to academic libraries (Meyer, 2004; Sivhabu, 2005). The above suggests that resources available to distance learners are mainly study guides, prescribed textbooks and other course material provided. Resources may be put on the internet, DVD discs or video cassettes. The majority of teachers at present studying through distance education based on print might have either a DVD or video player or both. Lecturers may be video-taped while demonstrating skills. The DVD discs or video cassettes could be sent to distance learners together with study guides. As the internet is concerned, teachers or distance learners should be

encouraged to rent the centres to look for resources on the internet. Presentation of contact sessions in the centres could be through playing DVD disks or video cassettes while lecturers are in satellite transmission in order to be able to assist learners in areas where they have some difficulties, or through satellite transmission.

6.6.8.5 Counselling

Counselling needs to be done by people who have studied psychology of education or have a degree in counselling (*cf*, 6.6.1). At present very little is being done in the form of counselling and preparing distance learners for studying in both programmes A and B (*cf*, 6.6.1). It is stated in chapter 4 (*cf*, 4.4.1) that student counselling helps students to overcome the difficulty of adjusting to the distance education learning environment. Counsellors need to provide both pre-course, in-course and post-course counselling.

Distance learners in pre-course counselling may be assisted in the choice of the field of study they can follow in any programme of distance education based on print (*cf*, 4.4.4.2). All distance learners need to be encouraged to attend pre-course counselling (*cf*, 6.6.2). In both programmes, particularly in programme A, counsellors need to be at established centres to assist distance learners before registering.

Through in-course counselling in both programmes A and B of distance education, teachers may be assisted to cope with pressure, examination preparation and examination anxiety (*cf*, 6.6.3). The process may enhance distance learners or teachers' learning processes in particular. Agents need to be afforded a chance of having student counsellors who could assist in in-course counselling (*cf*, 6.6.3). The policy of referring distance learners to traditional residential universities by agents seems not to be working.

Post-course counselling has to do with vocational guidance and for possible delay in achieving goals (*cf*, 6.6.4). The above suggests that teachers may get

advice about their career through post-course counselling. Post-course counselling needs to be made known to all distance learners to enable them to attend its activities in both types of programmes of distance education.

6.6.8.6 Assessment

In order for both types of programmes of distance education to satisfy the didactic-professional needs of teachers related to OBE, teachers in distance education need to be assessed cumulatively and formatively using the usual tests and exams methods, as well as by observing them practising the skills they have learned (*cf*, 3.4.7.1). This suggests that more academic support staff, particularly in programme A, should be available to support distance learners in this respect. Distance learners or teachers need to be shown which criteria they have achieved rather than allocating marks to them without good feedback. Teachers need to get feedback about exactly where they are strong or weak (*cf*, 3.4.7.1). The process could enable teachers to improve on their weak points and by doing so they become specialists in their learning areas. Assessment should ensure the attainment of all outcomes expected to be realised in the training on the required level.

6.7 CONCLUSION

The chapter presented the analyses and interpretation of data collected by means of questionnaires and interview questionnaires. The findings were as follows:

- Professionally and academically it can be said that the majority of teachers in the Venda region of the Limpopo Province are well qualified.
- The majority of secondary school teachers in the region were not trained for outcomes-based education.

- Distance education is preferred to satisfy the identified secondary school teachers' didactic-professional needs because it saves time and can be convenient as there are no demands for contact sessions.
- Secondary school teachers studying through distance education need assistance of student counsellors and tutors.
- Counselling enables distance learners to make a wise choice of their learning fields.
- At present counselling in general in distance education receives little or no attention.
- Programmes for student counselling should be made known to every student. The findings of this research show that the majority of distance learners are in the dark as far as programmes for student counselling are concerned.
- At present there are few or no tutorial lessons in institutions offering distance education, particularly in programme A.
- More tutors are needed to conduct tutorial lessons.
- There should be service centres near distance learners for easier contact.
- Contact sessions with tutors need to be offered regularly.
- The learning groups in tutorial lessons need to comprise a limited number of students, and tutors need to facilitate learning rather than to spoon-feed distance learners.
- Experts in distance education need to discuss the course first with the tutors before letting them conduct tutorial lessons if tutors are not from the institution offering distance education.

- Distance education can be the way to satisfy secondary school teachers' didactic-professional needs related to outcomes-based education. However, for this to be implemented successfully in the region, a well structured and consolidated plan of action, as proposed here, needs to be put in place.

The next chapter will offer the conclusion and recommendations.

CHAPTER 7

CONCLUSION AND RECOMMENDATIONS

7.1 INTRODUCTION

This study aimed at answering the question: How can the didactic-professional needs related to OBE of secondary school teachers in the Limpopo Province be met through distance education? Several sub-questions were posed to answer this question within the context of the problem under investigation. This chapter starts with a summary of the previous chapters of the research survey. The summary is followed by findings, recommendations, limitations of the investigation and final remarks.

7.2 SUMMARY

Chapter 1 dealt with the background of the study, and the research problem was stated. The research objectives were given. A division according to chapters was made.

Chapter 2 described the curriculum policy of education in South Africa prior to 1994. This was followed by the general background of outcomes-based education and the application of an outcomes-based curriculum in South African schools.

Chapter 3 addressed the first objective of this survey, i.e. to identify the didactic-professional needs related to OBE of secondary school teachers in the Limpopo Province. The chapter started by giving a comparison between content-based education and outcomes-based education followed by the description of the didactic-professional needs of secondary school teachers regarding outcomes-based education.

In chapter 4 the second objective was addressed. A description and assessment of the current role of distance education in satisfying secondary school teachers' didactic-professional needs related to OBE was done. The chapter started by giving some general aspects of distance education followed by an analysis of print as a mode distance education, the role of student counselling in distance education, the role of tutors in distance education and distance education as a way to satisfy secondary school teachers' didactic-professional needs.

Chapter 5 gave the methods and procedures followed to gain information from the respondents. The discussion in this chapter focused on the aim of the empirical study, design of research, population and sample, instrumentation and statistical techniques.

In chapter 6 the third objective was addressed, i.e. to investigate the effectiveness of distance education to satisfy the Limpopo Province secondary school teachers' didactic-professional needs related to OBE. The chapter paid attention to the analysis and interpretation of data collected. It started by giving the interpretation of the quantitative data collected by means of a questionnaire, followed by the interpretation of qualitative data collected by means of structured discussions and interviews, and criteria and guidelines for implementing print as a mode of distance education .

7.3 RESEARCH FINDINGS

7.3.1 Findings with regard to goal 1

Regarding goal 1, i.e. to identify the didactic-professional and academic needs related to OBE of secondary school teachers in the Venda region of the Limpopo Province, the following findings were made:

- Secondary school teachers need to improve their academic competence (*cf*, 3.3).
- Secondary school teachers need to know new terminology to come to grips with outcomes-based education (*cf*, 3.4.2).

- Teachers need to change from transmitters of knowledge to facilitators of learning (*cf*, 3.4.3).
- Secondary school teachers need to know and implement appropriate ways of learning according to outcomes-based education (*cf*, 3.4.4.).
- Teachers need to integrate educational activities over all eight learning areas and to promote conceptual progression in each learning area (*cf*, 3.4.5).
- Secondary school teachers need to know and implement teaching strategies that are relevant to outcomes-based education (*cf*, 3.4.6).
- Secondary school teachers need to know and implement new ways of assessment (*cf*, 3.4.7).

7.3.2 Findings with regard to goal 2

- Regarding objective 2, namely to describe and assess the current role of distance education in satisfying secondary school teachers' didactic-professional and academic needs related to OBE, the following findings were made:
- Distance education needs to give enough support in the form of counselling to secondary school teachers in order to satisfy their didactic-professional needs related to OBE (*cf*, 4.4.2).
- Institutions offering distance education need to have tutors at regional centres in order to satisfy secondary school teachers' didactic-professional needs related to OBE (*cf*, 4.5.2).

7.3.3 Findings with regard to goal 3

Regarding objective 3, i.e. to investigate the effectiveness of distance education to satisfy the Limpopo Province secondary school teachers' didactic-professional and academic needs related to OBE, some findings were made:

- The following six factors are regarded as important to satisfy secondary school teachers' didactic-professional and academic needs (*cf*, 6.4.1.3):

- Learning strategies centering around learners' activities.
 - Learner-centred assessing strategies.
 - Learners' performance assessing strategies.
 - Outcomes and methods of achieving outcomes.
 - Educator-centred teaching strategies.
 - Learner-centred teaching strategies.
- Counselling and preparation for study are important for distance education to satisfy secondary school teachers' didactic-professional needs (*cf*, 6.4.1.3).
 - Preparation for study and counselling only sometimes occur in distance education (*cf*, 6.4.1.3).
 - Distance education can and probably should be used to assist teachers in as far as their didactic-professional needs related to OBE are concerned (*cf*, 6.4.1.3).

The needs of certain groups of teachers seem to vary with regard to experience, desire and qualifications. The following are findings regarding those groups:

- Teachers with less than five years experience view the learning strategies centering around learners activities and outcomes and methods of achieving them not as important as those with more than five years experience (*cf*, 6.4.1.4).
- Secondary school teachers whose initial training might have been more pedagogical / professional than academic in focus, need support in many areas regarding OBE – related assessment practice (*cf*, 6.4.1.4).
- Teachers with Standard 10 plus a diploma or certificate as their academic qualifications view the role of student counselling and tutors in distance

education as more important than teachers with B degrees, B Ed / honours, and advanced degrees (*cf*, 6.4..1.4).

- Teachers with 16-20 years teaching experience seem to be more dependent on counselling in distance education than teachers with less than 16 or more than 20 years experience (*cf*, 6.4.1.4).
- Teachers with a desire to improve their professional qualifications seem to be more aware of opportunities for student counselling in distance education than those without that desire (*cf*, 6.4.1.4).
- Teachers and managers seem to be in agreement that in many areas teachers need the identified needs through literature study (*cf*, 6.4.1.4).
- Teachers with a desire to improve their academic qualifications seem to be more aware of teachers' needs than those without that desire (*cf*, 6.4.1.4).
- Teachers with a desire to improve their professional qualifications seem to be more aware of the opportunities for student counselling than those without that desire (*cf*, 6.4.1.4).

7.4 RECOMMENDATIONS

In the realization of goal 4, namely to identify strategies that can be used to improve distance education, the following recommendations are made:

- Contact sessions of distance learners with lecturers are inadequate. There should be regular contact sessions between distance learners and lecturers to enable lecturers to assist distance learners on how to use their study guides together with the prescribed text books, how to prepare assignments, how to approach the questions in the examination and also to explain the structure and content of courses (*cf*, 6.6.8.2). The process should enable teachers to know what is expected of them in the exams and when writing assignments.
- More centres should be established near distance learners so that every distance learner could participate in the sessions (*cf*, 6.5.3.1). The

process could enable distance learners to share their problems while in these centres. Transport costs to these centres could also be minimised for the distance learners.

- Regular tutorial lessons must be conducted for distance learners and teachers in particular. Experts on distance education need to workshop the tutors before taking them to tutorial lessons (*cf*, 6.5.3.1). Tutorial lessons need to follow contact sessions of distance learners with lecturers (*cf*, 6.6.8.3). In these lessons tutors need to facilitate rather than to be sources of knowledge. Teachers must be able to learn how to facilitate in the classroom.
- The group in the tutorial lesson for distance education should be composed of fewer learners to enable tutors to pay attention to each of them (*cf*, 6.5.3.1). Individual learners' or teachers' problems, in particular, could be addressed if the above is taken into consideration in distance education.
- Tutors in distance education should strive to enhance co-operation amongst distance learners (*cf*, 6.5.3.1). Shy learners should be encouraged to share their problems with fellow distance learners doing the same course with them.
- Technological aids need to supplement print as mode of distance education (*cf*, 6.6.7). The process could make distance education attractive to distance learners and to teachers in particular. Contact sessions between lecturers and distance learners could be done through satellite transmission.
- All distance learners should be encouraged to attend pre-course counselling before registering for distance education (*cf*, 6.6.2). The process could enable distance learners to make the right choice of the field of study they can follow in any programme. In both programmes, particularly in programme A, counsellors need to be at the established centres to assist distance learners before registering.

- Teachers already in one of the programmes of print as a mode of distance education need to have access to in-course counselling (*cf*, 4.4.3). In-course counselling could assist teachers to cope with pressure, examination preparation and examination anxiety.
- Teachers who fail their examination and those who pass at the end of the year should have access to post-course counselling (*cf*, 6.6.4). Programmes for post-course counselling need to be made known to distance learners. The process of post-course counselling could encourage teachers to repeat courses failed and also to give vocational guidance.
- Counselling must be the role of people who have studied psychology of education or who have a degree in counselling (*cf*, 6.5.2). Student counselling needs to aim at preventing learning problems, to remediate learning problems and to motivate students, in this instance teachers. It has been found in table 6.27 (*cf*, 6.4.1.3) that counselling sometimes occurs in distance education. Teachers could benefit a great deal from these processes.
- Teachers in distance education need to be assessed by using the usual tests and exam methods, as well as by observing them practising the skills they have learned (*cf*, 3.4.7.1). Teachers need to be shown which criteria they have achieved rather than to allocate marks to them without good feedback.
- In order to effectively implement the above recommendations, it is further recommended that a well-structured and coordinated plan of action is needed, comprising of:
 - Regular contact sessions with lecturers
 - Regular tutorial sessions
 - A multimedia approach
 - Purposeful counselling
 - Varied and appropriate assessment.

7.5 LIMITATION OF THE INVESTIGATION

There was some reluctance to co-operate on the part of some of the staff members involved on the subject of print as a mode of distance education. They did not respond to all the question and as a result access to some of the information was denied.

7.6. FURTHER INVESTIGATION

The following area appears to need further investigation:

- An analysis of improvement of academic-professional competence of teachers already in service through utilising applicably information communication technology as a mode of distance education in the Venda region of the Limpopo Province.

7.7 FINAL REMARKS

Although there is currently an outcry against in-service training methods that are not effective in addressing teachers' needs related to OBE in the Limpopo Province, distance education could assist in this regard if the proposed structure for offering effective distance education is taken into consideration . It is hoped that this structure will enable teachers to teach in an outcomes-based way and learners to learn in an outcomes-based way.

BIBLIOGRAPHY

- ANON. 2000. Telephonic communication between an official of the Open Learning Academy and the author. 6 March.
- BAILEY, K.D. 1987. Method of social research. New York : Collier MacMillan.
- BARTHOLOMEW, D.J., STEELE, F, MOUSTAKI, I & GALBRAITH, J.I. 2002. The analysis and interpretation of multivariate data for social scientist. Boca Raton : Chapman & Hall/CRC.
- BASSON, R. & NONYONGO, E. 1997. Interpreting the student perspective on DUSSPRO tutorial support and its implications for a distance education provider. *South African journal of higher education*, 11(2):97-110.
- BERESFORD, J. 2003. Creating the conditions to involve pupils in their learning. London : David Fulton Publishers.
- BORG, W.R. & GALL, M.D. 1989. Educational research: an introduction. New York : Longman.
- BOTHMA, F. 2003. Personal communication with the author. Potchefstroom.
- BURGE, E.J. & ROBERTS, J.M. 1998. Classroom with difference: facilitating learning on the information highway. 2nd ed. Montreal : McGraw-Hill. 142 p.
- CILLIERS, J.A., KIRSCHNER, P.A. & BASSON, T. 1997. Towards a new approach to distance education in physics: the first steps. *South African journal of higher education*, 11(1):114-121.
- CLAASSEN, C. 1998. Outcomes-based education: some insights from complexity theory. *South African journal for higher education*, 12(2):34-40.

- CLARK, D. 1996. School as learning communities: transforming education. London : Cassell. 184 p.
- CRITICOS, C. LONG, L. MOLETSANE, R. & MTHIYANE, N. 2002. Getting practical about outcomes – based teaching : learning guide. Cape Town: Oxford University Press.
- DANGALE, A.N. 2003. Verbal communication with the author. Thohoyandou. May 11.
- DEMANA, I.P. 2003. Verbal communication with the author. Thohoyandou. May 12.
- DEMANA, T.G. 2003. Verbal communication with the author. Thohoyandou. May 12.
- DE WOLF, H.C. 1994. Distance education. (*In The international encyclopedia of education. 2nd ed. Oxford : Pergamon Press. p. 1557-1563.*)
- DoE see SOUTH AFRICA. Department of Education
- DU PREEZ, A. 1998. Negotiating openness in a distance education system. *Progressio*, 20(1):59-77.
- ELLIS, S.M. & STEYN, H.S. 2003. Practical significance (effect sizes) versus or in combination with statistical significance (p-values). *Management dynamics*, 12(4):51-53.
- ERASMUS, J.C. 2002. Effective training for job creation in the South African education system. Potchefstroom : PU for CHE. (Thesis - Ph D.)
- EVANS, T. & NATIONS, D. 1996. Educational futures: globalisation, educational technology, and life long learning. (*In Evans, T. & Nation, D., eds. Opening education: policies and practices from open and distance education. London : Routledge. p. 1-6; 162-176.*)
- FARRELL, M., KERRY, T. & KERRY, C. 1995. The Blackwell handbook of education. Oxford : Blackwell Publishers. 333 p.

- FOURIE, M. 1999. From NATED 02-116 to the NQF: what are the implication for the higher education qualifications? *South African journal for higher education*, 13(2):14-20.
- FULLAN, M.G. 1996. The new meaning of educational change. London : Cassell.
- GAWE, N. 1998. Arming ourselves for recognition of prior learning. *South African journal for higher education*, 13(2):22-27.
- GELDERBLOM, S. & DE KOCK, G.L. 1995. Cooperative learning as a possible solution to teach home economics to large class groups in secondary schools. *Journal of dietics and home economics*, 23(1):58-60.
- GUNTER, M.A, ESTES, T.H. & SCHWAB, J. 2003. Instruction: a model of approach. New York : Pearson Education
- HALL, M.W. & MARRET, C. 1996. Quality teacher education via distance mode: a Caribbean experience. *Journal of education for teaching*, 22(1): 86-94.
- HENNING, E., GRAVETT, S. & DANIELS, D. 1998. Rules for another language game in a teacher development programme for initial reading pedagogy. *Journal for language teaching*, 32(3):191-199.
- HOPKINS, D. 1996. Towards a theory for school improvement. (In Grey, J., Reynolds, D., Fitts-Gibbon, C. & Jesson, D., eds. Merging traditions: the future of research on school effectiveness and school improvement. London : Cassell. p. 30-48.)
- ITANI, T.J. 2003. Verbal communication with the author. Thohoyandou. May 13.
- JANSEN, J.D. 1999. Setting the scene: historiographies of curriculum policy in South Africa. (In Jansen, J. & Christie, P., eds. Changing curriculum: studies on outcomes-based education in South Africa. Kenwyn : Juta. p. 3-18.)

KLOPPER, M. 2003. Personal communication with the author.
Potchefstroom. June 23.

KRAAK, A. 1999. Competing education and training policy discourses: a “systematic” unit standards framework. (In Jansen, J. & Christie, P., eds. Changing curriculum studies on outcomes-based education in South Africa. Kenwyn : Juta. p. 21-58.)

KRAMER, D. 1999. OBE teaching toolbox: OBE strategies, tools and technique for implementing Curriculum 2005. Florida Hills : Vivlia.

LEEDY, P.D. 1997. Practical research: planning and design. London : Prentice Hall.

LEEDY, P.D & ORMOD, J.E. 2001. Practical research : planning and design. London: Prentice Hall.

LETUKA, L.J. 2000. The establishment of a quality assurance system for further and higher education and training in the Free State region based on self evaluation. *South African journal for higher education*, 14(2):112-116.

LIMPOPO PROVINCE (South Africa). Department of Education. 2003. Curriculum Transformation for High Schools in South Africa for the period between 2003 and 2008. Polokwane.

LOWSON, M.J. 1997. Experimental studies. (In Keeves, J.P., ed. Educational research, methodology, and measurement: an international handbook. Oxford : Pergamon. p. 126-133.)

LUBISI, C., PARKER, B. & WEDEKIND, V. 1998. Understanding outcomes-based education: teaching and assessment in South Africa. 2 volumes. Cape Town : Oxford University Press.

MACKINTOSH, W.G. 1999. Caveat of the transformation of tertiary open distance learning: Africa dancing with the imperatives of the second learning revolution. *South African journal of higher education*, 13(3):57-68.

- MADZUYE, S.J. 2003. Verbal communication with the author. Thohoyandou. May 14.
- MAHOMED, H. 1998. The implementation of OBET in South Africa: pathway to success or recipe for failure? *Education practice*, 1:3-16, July.
- MALCOLM, C. 1999. Outcomes-based education has different forms. (*In* Jansen, J. & Christie, P., eds. *Changing curriculum: studies on outcomes-based education in South Africa*. Kenwyn : Juta. p. 77-113.)
- MARTIN, E. & FAXAS, Y.F. 1994. Curriculum continuities and discontinuities in education. (*In* The international encyclopedia of education. 2nd ed. Oxford : Pergamon Press. 3:1227-1233.)
- MASINDI, M. 2003. Verbal communication with the author. Thohoyandou. May 14.
- MEDIA IN EDUCATION TRUST. 1997. Curriculum 2005. April.
- MEISTER, B.R. 1994. Direct instruction. (*In* The international encyclopedia of education. 2nd ed. Oxford : Pergamon Press. p. 1524-1530)
- MEYER, L.W. 2004. Personal communication with the author. Potchefstroom. Sept. 28.
- MONTADA, L. 1994. Problem solving and learning: computer modelling. (*In* The international encyclopedia of education. 2nd ed. Oxford : Pergamon Press. 8:4719-4722.)
- MOORE, M.G. 1994. Distance education at the school level. (*In* The international encyclopedia of education. 2nd ed. Oxford : Pergamon Press. p. 1563-1567.)
- MOORE, M.G. & KEARSLY, G. 1997. Distance education: a systems view. *Progressio*. 19 (1) : 166 – 167

- MOTHATA, M.S., MDA, T. & COSSER, M.C. 1998. The national qualification framework (NQF). (*In Pretorius, F., ed. Outcomes-based education in South Africa. London : Hodder & Stoughton. p. 13-26.*)
- NELSON, J.L., CARLSON, K. & POLONSKY, S.B. 1996. Critical issues in education: a dialectic approach. New York : McGraw-Hill.
- NEMBILWI, N.K. 2003. Verbal communication with the author. Thohoyandou. May 13.
- NORTHERN PROVINCE. (South Africa). Department of Education. 2001. Curriculum 2005 in a nutshell: outcomes-based education. Intermediate and senior phase. Pietersburg.
- NORTHERN PROVINCE. (South Africa). Department of Education. 2000. OBE in a nutshell (the C 2005 version): senior and intermediate phase. Pietersburg.
- NUNNALLY, J. 1978. Psychometric theory. New York : Mc-Graw-Hill.
- OLIVIER, C. 1998. How to educate and train: outcomes-based. Pretoria : Van Schaik.
- OPWIS, K. & SPADA, H. 1994. Problem solving and thinking: development of learning skills. (*In The international encyclopedia of education. 2nd ed. Oxford : Pergamon Press. p. 4722-4727.*)
- ORIVEL, F. 1994. Distance education: Economic Evaluation. (*In The international encyclopedia of education. 2nd ed.*) Oxford : Pergamon Press. p. 1567-1573.)
- ORIVEL, F. 1996. Evaluation of distance education: cost effective. (*In The international encyclopedia of education. 2nd ed. Oxford : Pergamon Press. p.843-848.*)
- PETERS, O. 1998. Learning and teaching in distance education: analysis and interpretations from an international perspective. London : Kogan Page. 248 p.

- PHARAMELA, N.P. 2003. Verbal communication with the author. Thohoyandou. May 13.
- POTENZA, E. 1999. Curriculum 2005 will soon be taught in four grades: get ready for grade 7. *Teacher*:12, Sept.
- POTENZA, E. 2002. The seven roles of the teacher. *Teacher*:12, Feb.
- POTENZA, E. & JANSEN, J. 1998. Outcomes-based education: will it benefit our children? *Fair lady*, 31:52-56, Jan. 21.
- RAMALIVHANA, F.E. 2003. Verbal communication with the author. Thohoyandou. May 15.
- RAMUTUMBU, T.A. 2003. Verbal communication with the author. Thohoyandou. May 15.
- ROWNTREE, D. 1996. Preparing material for open, distance and flexible learning: an action guide for teachers and trainers. London : Kogan Page. 170 p.
- ROWNTREE, D. 2000. Exploring open and distance learning. London : Kogan Page.
- SAS Institute Inc. 1999. SAS Institute Inc., SAS online Do@, Version 8, Cary, NC.
- SCHNETLER, J. 1989. Principles of constructing questions and questionnaire. (In Schnetler, J. ed. Survey methods and practice. Pretoria : HRSC. P. 44-99)
- SCHULTZE, S. 1998. Theoretical frameworks in environmental education: some Australian and South African views. *South African journal of education*, 19(1):60-65, Feb.
- SCOTT, M. 2003. Personal communication with the author. Potchefstroom. Jun. 23.

- SEDIBE, E.M. 1998. Distance education through the medium of television: case study of the University of Pretoria's interactive teleteaching. *Journal of education and training*, 19(2):93-100.
- SIDHU, K.S. 1984. Methodology of research in education. New Delhi : Sterling. 308 p.
- SIKHAVHAKHAVHA, P.M. 1999. Didactic-professional inservice training and development needs of secondary school teachers in a region of the Northern Province. Potchefstroom : PU for CHE. (Dissertation - M.Ed.)
- SIVHABU, T.E. 2005. Personal communication with the author. Johannesburg; July 14
- SKINNER, J. 1999. Critical outcomes: political paradoxes. (In Jansen, J. & Christie, P., eds. Changing curriculum: studies on outcomes based education in South Africa. Kenwyn : Juta. p. 117-130.)
- SLAVIN, R.E. 1996. Co-operative-learning in middle and secondary schools. *Clearing house*, 69(4):200-204, March-April.
- SOUTH AFRICA. Department of Education. 2000. A South African curriculum for The Twenty First Century. Pretoria , May 31 –2000. [Web :] [http ; ll www. Policy org. za / gov docs / reports /education / curric 2005/](http://www.Policy.org.za/govdocs/reports/education/curric2005/). [Date of access: 2 March 2005]
- SPADY, W.G. 1994. Outcomes – based education : critical issues and answers. Arlington: American association of school administrators.
- SPADY, W.G. & SCHLEBUSCH, A. 1999. Curriculum 2005: a guide for parents. Cape Town: Tafelberg Publishers
- SOUTH AFRICA. Department of Education. 1997a. Curriculum 2005: lifelong learning for 21st century. A user guide. Pretoria.
- SOUTH AFRICA. Department of Education. 2001. Draft revised National Curriculum Statement. Pretoria.

- SOUTH AFRICA. Department of Education. 2003. National Curriculum Statement. Pretoria.
- SOUTH AFRICA. Department of Education. 2005. National Curriculum Statement. Pretoria.
- SOUTH AFRICA. Department of Education. 2000a. Norms and standards for educators. (National education policy act no. 27,1996.) *Government Gazette*, 415, February 4. (Regulation Gazette No. 20844.)
- SOUTH AFRICA. Department of Education. 1997b. Outcomes based education in South Africa: background information. March. Pretoria.
- SOUTH AFRICA. Department of Education. 2000b. SABINET online: detailed record. *Government Gazette*, 21565:4, Sept. 22.
- SOUTH AFRICA. Department of Education. 1997c. Senior phase policy document. October. Pretoria.
- SOUTH AFRICA. Department of Education. 2002. Revised National Curriculum Statement. Pretoria.
- SOUTH AFRICAN INSTITUTE FOR DISTANCE EDUCATION (SAIDE). 1995. Open learning and distance education: report on internal commission, January-April 1994.
- STAKE, R.E. 1995. The art of case study research. London : Sage.
- STEYN, A.G.V, SMIT, C.F. & DU TOIT ,S.H.C.1998. Modern Statistics in practice. Pretoria: Van Schaik.
- STEYN, G.M. 1999. Professional development: a key to school improvement. *South African journal of education*, 19(3):206-213, Aug.
- TAYLOR, M. 1999. Removing the examination hurdle: nuts and bolts of curriculum 2005 outcomes-based education. *Financial mail*, 152(5):36-37.
- UNTERHALTER, E. 1999. Globalisation, gender and curriculum 2005. *Agenda*, 41:26-31.

- VAN DEEMTER, E. 2004. Personal communication with the author. Johannesburg. August 10.
- VAN DER HORST, H. & McDONALD, R. 1997. OBE, outcomes based education: a teacher's manual. Pretoria : Kagiso.
- VAN DER HORST, H. & McDONALD, R. 1998. OBE outcomes-based education: an illustrative orientation. *Educare*, 27(1):18-28.
- VAN DER MERWE, D, 1999. Student counselling in distance education; the UNISA experience. *Progressio*. 19 (1): 57-68.
- VAN DER VYVER, J. 1998. The missing welcome mat in outcomes-based education. *Education practice*, 1:8-24, July.
- VAN ZYL, H. 1997. Distance education: a systems view by Moore, M.G. & Kearsley: book review. *Progressio*, 19(1):166-167.
- VENTER, E. 2003. Verbal communication with the author. Pretoria. Jun. 30.
- VERMEULEN, L.M. 2003. Curriculum 2005. School and classroom organization and assessment for Senior Phase (Grades 7 – 9). Vanderbijlpark: PU for CHE.
- WAGHID, Y. 1997a. Becoming critical of distance theory again. *South African Journal of Education*, 17 (3):112-116.
- WAGHID, Y. 1997b. Can intersubjectivity contribute towards filling the conceptual spaces in distance education research? *South African journal of education*, 11 (1) : 26-33.
- WALLACE, S.D. 1998. The vital role of distance education in promoting access to effective teacher (educator) upgrading, retraining, and in-service education. *South African journal of higher education* , 12 (2) : 12-16.
- WASPE, J. 1997. A new way of teaching and learning. *Challenge*, 44:22-23, October.
- WATKINS, G. 1997. Towards better outcomes: education. *Enterprise*, 114:164-167, Oct.

WESSELS, M. & VAN DEN BERG, R. 1998. Practical guide to facilitating language learning: methods activities and techniques for OBE. New York : International Thomson publishing.

WIERSMA, W. 1985. Research methods in education. Boston, Mass. : Allyn and Bacon.

WILKENS, F. & PATEL, F. 1998. Aspect of classroom management planning and implementing a learning programme. (In Pretorius, F., ed. Outcomes-based education in South Africa. Johannesburg : Hodder & Stoughton.

ANNEXURES

- Annexure A: Letter to the Department of Education
- Annexure B: Reply from the Regional Director
- Annexure C: Questionnaire
- Annexure D: Letter to the people interviewed
- Annexure E: Interview questionnaire for the experts of distance education
- Annexure F: Interview questionnaire of teachers studying through distance education

ANNEXURE A

P O Box 74
TSHILAPHALA
0977

23rd June 2003

The Regional Director
Department of Education and Culture
Private Bag X 2250
SIBASA
0970

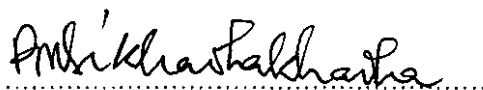
Sir

I am conducting a study titled:

**CRITERIA AND GUIDELINES FOR DISTANCE EDUCATION TO SATISFY
SECONDARY SCHOOL TEACHERS' DIDACTIC-PROFESSIONAL NEEDS
RELATED TO OUTCOMES-BASED EDUCATION**

I am studying at PU for CHE for a PhD-degree in Education. Your region cover the population of the study. I wish to request you to allow me to distribute the questionnaire in the schools in your region.

Yours faithfully



P M Sikhavhakhavha



SIBASA

VENDA

0970

Tel: (015) 962 1313

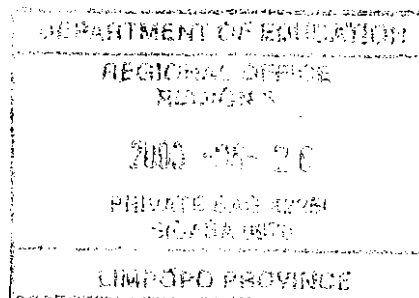
(015) 962 1331

Fax.: (015) 962 6039

(015) 962 3076.

Ref. 8/3/1
Enq. Makuya

P.M. Sikhavhakhavha
P.O. Box 74
TSHILAPHALA
0977



1. Your letter dated 23/06/2003 regarding the above mentioned exercise was received by our office.
2. The District grant you permission to distribute the questionnaire in the school.
3. It is the official procedure that you consult the Circuit Mangers for arrangement before you commence.
4. The District wishes all the best in your research study.

DISTRICT SENIOR MANAGER : EDUCATION

 λ/mm 

**DEPARTMENT OF EDUCATION
NORTHERN REGION**

PEOPLE FIRST, VANHU EMAHLWENI, VHATHU PHANDA, MENSE EERSTE

ANNEXURE C

CRITERIA AND GUIDELINES FOR DISTANCE EDUCATION TO SATISFY SECONDARY SCHOOL TEACHER'S DIDACTIC-PROFESSIONAL NEEDS RELATED TO OUTCOMES-BASED EDUCATION

Office use only

Survey number

--	--	--

 (1-3)

INSTRUCTION

1. Please do not write your name or that of your school on one of the forms. The information is required for research only.
2. Kindly respond to all questions
3. Please note that there are no wrong or correct answers, only honest ones.

PART ONE : BIOGRAPHICAL AND DEMOGRAPHICAL DATA

N.B Circle the appropriate number

1. Gender
- | | |
|--------|---|
| Male | 1 |
| Female | 2 |
- (4)

2. Your age
- | | |
|---------------|---|
| 20 – 29 years | 1 |
| 30 – 39 years | 2 |
| 40 – 49 years | 3 |
| 50 + years | 4 |
- (5)

3. What is your highest academic qualifications?
- | | |
|-----------------|---|
| Std 10 | 1 |
| B. degree | 2 |
| B. Ed / honours | 3 |
| M. degree | 4 |
| D. degree | 5 |
- (6)

4. What is your highest professional qualification?

PTC	1
JSTC	2
SPTC	3
STD	4
UED / HED	5
Integrated degree	6

(7)

5. Position you occupy

Teacher	1
Departmental Head	2
Deputy Principal	3
Principal	4

(8)

6. Number of years in the position you occupy

0-5 years	1
6-10 years	2
11-15 years	3
16 – 20 years	4
21 + years	5

(9)

7. Highest academic training you received for the subject / learning area you are teaching?

None	1
Std 10	2
College Training	3
Course One of a degree	4
Course two of a degree	5
Course three of a degree	6
Post Graduate degree	7

(10)

PART TWO : IMPROVEMENT OF ACADEMIC AND PROFESSIONAL COMPETENCE

8. Have you improved your academic qualifications while you are working

Yes	1
No	2

(11)

9. If yes, was this done through distance education?

Yes	1
No	2

(12)

10. Have you earned a post graduate degree or technikon degree while you are working .

Yes	1
No	2

(13)

11. If yes, was this earn through distance education?

Yes	1
No	2

(14)

12. Are you currently improving your academic qualifications?

Yes	1
No	2

(15)

13. If yes, are you doing the above through distance education?

Yes	1
No	2

(16)

14. Have you improved your professional qualifications while you are working?

Yes	1
No	2

(17)

15. If yes, was it done through distance education?

Yes	1
No	2

(18)

16. Do you want to improve your academic qualifications ?

Yes	1
No	2

(19)

17. If yes, would you consider distance education?

Yes	1	(20)
No	2	

18. Give reason why you will consider distance education.....

19. Do you want to improve your professional qualification?

Yes	1	(21)
No	2	

20. If yes, would you consider distance education?

Yes	1	(22)
No	2	

21. Give reason why you will consider distance education

TEACHERS' NEEDS RELATED TO OBE

The following concepts or statements are given. Circle the appropriate number of each concept or statement to indicate the degree in which you think secondary school teachers need assistance on the items to enable them to teach effectively in the OBE teaching-learning situation using the following key:

- 1- Definitely
- 2- In many areas
- 3- In few areas
- 4- Definitely not

22. Critical and developmental outcomes

1	2	3	4	(23)
---	---	---	---	------

23. Learning outcomes

1	2	3	4	(24)
---	---	---	---	------

24. Learning programmes

1	2	3	4	(25)
---	---	---	---	------

25. Assessment standards

1	2	3	4	(26)
---	---	---	---	------

26. Learning through doing things

1	2	3	4	(27)
---	---	---	---	------

27. Learning through discovery

1	2	3	4
---	---	---	---

 (28)
28. Learning through communication with others

1	2	3	4
---	---	---	---

 (29)
29. Learning when learners are not afraid of failing

1	2	3	4
---	---	---	---

 (30)
30. Use of real life situations in their teachings.

1	2	3	4
---	---	---	---

 (31)
31. Lesson planning.

1	2	3	4
---	---	---	---

 (32)
32. Creating learning environments.

1	2	3	4
---	---	---	---

 (33)
33. Facilitating learning.

1	2	3	4
---	---	---	---

 (34)
34. Teaching through educator centred strategy

1	2	3	4
---	---	---	---

 (35)
35. Teaching through learner-centred strategy

1	2	3	4
---	---	---	---

 (36)
36. Teaching through independent learning strategy

1	2	3	4
---	---	---	---

 (37)
37. Teaching through co-operative learning strategy.

1	2	3	4
---	---	---	---

 (38)
38. Teaching through straight forward presentation of facts, concepts or skills

1	2	3	4
---	---	---	---

 (39)
39. Teaching through discovery learning strategy.

1	2	3	4
---	---	---	---

 (40)

40. Teaching through problem solving

1	2	3	4
---	---	---	---

(41)

41. Assessing through portfolio
assessment.

1	2	3	4
---	---	---	---

(42)

42. Assessing through performance
assessment

1	2	3	4
---	---	---	---

(43)

43. Assessing through peer
assessment

1	2	3	4
---	---	---	---

(44)

44. Assessing through self assessment

1	2	3	4
---	---	---	---

(45)

45. Assessing through observation
sheets

1	2	3	4
---	---	---	---

(46)

46. Assessing through journals

1	2	3	4
---	---	---	---

(47)

47. Assessing through teacher made tests

1	2	3	4
---	---	---	---

(48)

PART THREE: THE ROLE OF DISTANCE EDUCATION IN SATISFYING TEACHERS' DIDACTIC-PROFESSIONAL NEEDS.

THE ROLE OF STUDENT COUNSELLING AND TUTORS IN DISTANCE EDUCATION.

Indicate to what extent secondary school teachers need assistance in the following in distance education using the following key (N.B. circle the appropriate number):

- 1- Definitely
- 2- In many areas
- 3- In few areas
- 4- Definitely not

48.. Study Orientation and induction.
towards the intended study

1	2	3	4
---	---	---	---

(49)

49. Analysis of study problems related to the learning
content.

1	2	3	4
---	---	---	---

(50)

50. Reading skills.

1	2	3	4
---	---	---	---

(51)

51. Preparation for examination.

1	2	3	4
---	---	---	---

(52)

52. Pre-course counselling.

1	2	3	4
---	---	---	---

(53)

53. In-course counselling.

1	2	3	4
---	---	---	---

(54)

54. Post-course counselling.

1	2	3	4
---	---	---	---

(55)

55. Counsellors for Students

1	2	3	4
---	---	---	---

(56)

56. Tutors.

1	2	3	4
---	---	---	---

(57)

OPPORTUNITIES FOR STUDENT COUNSELLING AND TUTORIAL LESSONS IN DISTANCE EDUCATION.

If you have been or currently are involved with distance education, answer the following according to your experience. If you have not been involved with distance education, answer the following according to what you expect

1 – Very frequently occurs

2- Often occurs

3- Sometimes occurs

4-Rarely Occurs

57. Study orientation and induction.

1	2	3	4
---	---	---	---

 (58)
58. Study learning management.

1	2	3	4
---	---	---	---

 (59)
59. Analysis of study problems including exploring reasons for examination failure and strategies.

1	2	3	4
---	---	---	---

 (60)
60. Reading skills.

1	2	3	4
---	---	---	---

 (61)
61. Preparation of examination.

1	2	3	4
---	---	---	---

 (62)
62. Pre-course counselling.

1	2	3	4
---	---	---	---

 (63)
63. In-course counselling.

1	2	3	4
---	---	---	---

 (64)
64. Post- course counselling.

1	2	3	4
---	---	---	---

 (65)
65. Face-to-face tutoring which is usually done in groups.

1	2	3	4
---	---	---	---

 (66)
66. Occasional one to one sessions with tutors.

1	2	3	4
---	---	---	---

 (67)

DISTANCE EDUCATION AS A WAY TO SATISFY SECONDARY SCHOOL TEACHERS' DIDACTIC-PROFESSIONAL NEEDS.

The following are roles brought about by outcomes-based education that teachers need to assume. Indicate to what extent distance education can be used to render assistance to secondary school teachers to assume these roles using the following key (N.B. circle the appropriate number)

- 1-Definitely
- 2-In many areas
- 3- In few areas
- 4-Definitely not

67. To enable them to become learning mediators.

1	2	3	4
---	---	---	---

 (68)

68. To enable them to become interpreters, and designers of learning programmes and materials.

1	2	3	4
---	---	---	---

 (69)

69. To enable them to become lifelong learners

1	2	3	4
---	---	---	---

 (70)

70. To enable them to become administrators

1	2	3	4
---	---	---	---

 (71)

71 To enable them to become managers

1	2	3	4
---	---	---	---

 (72)

72. To enable them to develop supportive relations with parents and other key persons and organisations based on critical understanding of community development issues.

1	2	3	4
---	---	---	---

 (73)

73. To enable them to develop a supportive and empowering environment for learners.

1	2	3	4
---	---	---	---

 (74)

74. To enable them to respond to the educational and other needs of learners and fellow educators.

1	2	3	4
---	---	---	---

 (75)

75. To enable them to become assessors
of learning in OBE

1	2	3	4
---	---	---	---

(76)

76. To enable them to become learning
area/ subject/ discipline/ phase
specialists.

1	2	3	4
---	---	---	---

(77)

Answer the following question briefly, but clearly.

77. What is lacking in distance education by printed material to satisfy the
didactic-professional needs of secondary school teachers related to
outcomes-based education?

.....

.....

78. What is the most positive aspect of distance education by **printed material** in
satisfying the didactic-professional needs related to outcomes-base education?

.....

.....

79. Would you prefer other ways of distance education than by **printed materials**? Specify

80. Would you like to add anything?

.....

.....

ANNEXURE D

P O Box 74
TSHILAPHALA
0977

23rd June 2003

Dear Sir / Madam

I am conducting a study titled:

**CRITERIA AND GUIDELINES FOR DISTANCE EDUCATION TO SATISFY
SECONDARY SCHOOL TEACHERS' DIDACTIC-PROFESSIONAL NEEDS
RELATED TO OUTCOMES-BASED EDUCATION**

I am studying at PU for CHE for a PhD-degree in Education. You have been chosen as part of my interview sample. I'll be pleased if you allow me to interview you for this study. Enclosed please find a list of questions on which the interview is based.

Yours faithfully



P M Sikhavhakhavha

ANNEXURE E

THE ROLE OF DISTANCE EDUCATION IN SATISFYING TEACHERS' DIDACTIC-PROFESSIONAL NEEDS.

INSTRUCTION.

1. The information is required for research.
2. Kindly respond to all questions.
3. Please note that there are no wrong or correct answer, only honest ones.

PART ONE: STUDENT COUNSELLING IN DISTANCE EDUCATION.

1. What are the criteria for one to become a student counsellor?
2. For what purpose is counselling done?
3. What are the requirements for successful counselling?
4. To what extent are these requirements for successful counselling taken into consideration in your institution?
5. To what degree are the following activities of student counselling taken into consideration in your institution to assist distance learners? Substantiate your answers.
 - 5.1. Study orientation and induction.
 - 5.2. Analysis of study problems and strategies for success when repeating courses.
 - 5.3. Training in reading skills.
 - 5.4. Preparation for examination.
 - 5.5. Pre-course counselling
 - 5.6. In-course counselling
 - 5.7. Post-course counselling
6. How can student counselling be improved in your institution?
7. Do you want to add anything regarding student counselling?

PART TWO: TUTORING IN DISTANCE EDUCATION.

8. What are the criteria for one to become a tutor?
9. How do tutors address general problems encountered by learners regarding content during tutoring process?
10. What method is used by tutors to address problems of each and every individual learner?
11. How could access to competent tutors by students be of assistance to them?
12. In what way could the discussion between a tutor and a group of distance learners compromise attention to an individual student?
13. How can the problem in 12 above be addressed?
14. To what extent is social interaction between distance learners during tutorial lessons of assistance to them?
15. How can the tutor address shyness of students which may inhibit dialogue in some groups?
16. In what way could tutoring be implemented to address secondary school teachers' needs related to outcomes-based education?
17. Would you like to add anything regarding tutoring in distance education?

ANNEXURE F

THE ROLE OF DISTANCE EDUCATION IN SATISFYING TEACHERS' DIDACTIC-PROFESSIONAL NEEDS.

INSTRUCTION

1. The information is required for research.
2. Kindly respond to all questions.
3. Please note that there are no wrong or correct answers, only honest ones.

PART ONE: STUDENT COUNSELLING IN DISTANCE EDUCATION.

1. What is student counselling?
2. In what way do you benefit from counselling?
3. How often is counselling conducted in the institution in which you are learning?
4. In what way do you benefit from the following activities of student counselling?
 - 4.1. Study orientation and induction.
 - 4.2. Analysis of study problem and strategies for success when repeating courses.
 - 4.3. Training in reading skills.
 - 4.4. Preparation for examination.
 - 4.5. Pre-course counselling
 - 4.6. In-course counselling
 - 4.7. Post-course counselling
5. What need to be done to improve, students counselling?
6. Do you want to add anything regarding student counselling in the institution in which you are studying?

PART TWO: TUTORING IN DISTANCE EDUCATION.

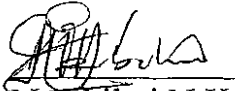
7. Who are tutors?
8. In what way do you benefit from the manner in which general problems you encountered in the learning content are addressed during tutorial lessons?
9. How are problem of individual learners related to learning content addressed by tutors?
10. How could access to competent tutors be of assistance to you?
11. In what way could the discussion between a tutor and a group of learners be of disadvantage to you?
12. What need to be done by tutors to address the above.
13. To what extent is social interaction between or amongst you distance learners during tutorial lessons of assistance to you?
14. What need to be done to address shyness of some of you students which may inhibit dialogue in some groups?
15. In what way should tutoring be implemented to address your needs related to outcome-based education?
16. Would you like to add anything regarding tutoring in distance education?

P.O.Box 1828
Vhufuli
0971

TO WHOM IT MAY CONCERN:

This is to confirm that permission has been granted to Mr
Sikhavhakhavha P.M. to use this information from the interview he held
with me.

Yours Faithfully


Nembilwi N.K

MR. NEMBILWI'S RESPONSE TO THE INTERVIEW

PART ONE : STUDENT COUNSELLIGN IN DISTANCE EDUCATION

1. What is student counselling

- It is an emotional, psychological and physiological assistance offered to registered student.

2. In what way do you benefit from conselling?

- It removes fears; until responsibility and prepares me for the rough or smooth road ahead.

3. How often is counselling conducted in the institution in which you are learning?

- It stretches from the beginning of the year to the beginning of the last quitter through appointment.

4. In what way do you benefit the following form activities of student counselling?

4.1. Study orientation and induction

- It helps me to choose the right field of study.

4.2. Analysis of study problems and strategies for success when repeating courses.

- I am shown correct study methods in order to succeed.

4.3. Training in reading skills

- This improves my chances of passing examination

4.4. Preparation for examination

- I do not know

4.5. Pre-course counselling

- It enables me to make a wise choice of their learning field.
-

4.6. In-course counselling

- I haven't heard of this process

4.7. Post-course counselling

- I haven't heard of this process

5. What needs to be done to improve student counselling?

- I do not know

6. Do you want to add anything regarding students counselling?

No

PART TWO : TUTORING IN DISTANCE EDUCATION

7. Who are tutors

- Tutors may be lecturers, dean or professors.

8. In what ways do you benefit from the manner in which general problems are addressed during tutorial lessons?

- This enables me to benefit from my studies

9. How are problems of individual learners related to the content addressed by tutors?

- I do not know.

10. How could access to competent tutors be of assistance to you?

- I could get the most important advice regarding the study of learning content and how to write assignments.

11. In what ways could the discussion between a tutor and a group of learners be of disadvantage to you?

- I do not have the right answer to that

12. What need to be done to address the above

- Tutors need to master the content before they come to the student.

13. To what extent is social interaction between or amongst distance learners during tutorial lesson of assistance to you?

- Chances of sharing ideas are increased.

14. What need to be done to address shyness of some of distance learners which inhibits dialogue in some groups?

- Distance learners need to be given tasks to prepare and present.

15. In what way should tutoring be implemented to address secondary school teachers needs related to outcomes based education?

- I do not have the right answer to that

16. Would you like to add anything regarding tutoring in distance education?

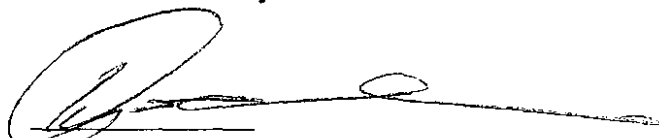
No

P.O.Box 527
Vhufuli
0971

TO WHOM IT MAY CONCERN:

This is to confirm that permission has been granted to Mr
Sikhavhakhavha P.M. to use this information from the interview he held
with me.

Yours Faithfully



Dangale A.N.

MR. DANGALE'S RESPONSES TO THE INTERVIEW

PART ONE : STUDENT COUNSELLING IN DISTANCE EDUCATION

1. What is student counselling

- It is the way in which students are guided on which course to study.

2. In what way do you benefit from counselling?

- It assist me in the selection of courses and in the selection of methods of learning.

3. How often is counselling conducted at the institution at which you are learning.

- It is rarely done

4. In what way do you benefit from the following activities of student counselling?

4.1. Study orientation and induction

- I learn methods of studying and how to use university facilities such as library.

4.2. Analysis of study problems and strategies for success when repeating courses.

- The process increases my chances of passing.

4.3. Training in reading skills

- It helps me to know how to deal with large amount of work.

4.4. Preparation for examination

- It increases my chances for passing the examination

4.5. Pre-course counselling

- More knowledge about the course I want to study is gained.

4.6. In-course counselling

- It enhances my level of studying.
-

4.7. Post-course counselling

- There is no post- course counselling in the institutional where I am studying
5. What needs to be done to improve student counselling?
- Counselling must be compulsory for all distance learners.
6. Do you want to add anything
- No

PART TWO : TUTORING IN DISTANCE EDUCATION

7. Who are tutors?

- Tutors are people who teach students during tutorial lessons.

8. In what ways do you benefit from the manner in which general problems are addressed during tutorial lessons?

- I may benefit by sharing ideas during tutorial lessons.

9. How are problems of individual learners related to the content addressed by tutor.

- The principle of individualization is used to address problems of individual learners.

10. How could access to competent tutors of assistance to you?

- Competent tutors guide me to exam-related matters.

11. In what ways could the discussion between a tutor and a group of learners of disadvantage to you?

- Individual problems may not be attended to effectively.

12. What need to be done to address the above?

- Learners with the same problem should be grouped together.

13. To what extent is social interaction between or amongst distance learners during tutorial lessons of assistance to you?

- My chances of sharing ideas are increased.

14. What need to be done to address shyness of some of distance learners which inhibits dialogue in some groups?

- I do not know.

15. In what way should tutoring be implemented to address secondary school teachers' need related to outcomes-based education.

- I do not know

16. Would you like to add anything regarding tutoring in distance education?

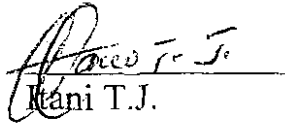
- Distance learners need to be encouraged to attend tutorial lessons.

P.O.Box 2365
Thohoyandou
0950

TO WHOM IT MAY CONCERN:

I am hereby giving permission to Mr Sikhavhakhavha P.M. to use this information from the interview; he held with me.

Yours Faithfully


Itani T.J.

MR. ITANI'S RESPONSES TO THE INTERVIEW

PART ONE : STUDENT COUNSELLING IN DISTANCE EDUCATION

1. What is student counselling

- It is a contact session where distance learners are taught to write assignments or to be cleared on the topic that is important to the examination.

2. In what way do you benefit from counselling?

- It assists me in the selection of courses and in the selection of methods of learning.

3. How often is counselling conducted at the institution at which you are learning?

- It is rarely done

4. In what way do you benefit from activities of student counselling?

4.1. Study orientation and induction

- It is done through paper works such as how to write assignments.

4.2. Analysis of study problems and strategies for success when repeating courses

- There is no such a process

4.3. Training in reading skills

- There is no such a training

4.4. Preparation for examination

- Learners may be given an indication of what to expect in the exam.

4.5. Pre-course counselling

- It is never done

4.6. In-course counselling

- It is never done

4.7. Post-course counselling

- It is never done

5. What needs to be done to improve students counselling?

- I do not know

6. Do you want to add anything regarding student counselling in the institution at which you are studying?

No

PART TWO : TUTORING IN DISTANCE EDUCATION

7. Who are tutors

- Tutors may be people employed temporarily for different courses in different institution of higher learning.

8. In what way do you benefit from the manner in which general problems are addressed during tutorial lessons?

- I do not know

9. How are problems of individual learners related to the content addressed by tutors?

- I do not know. I have never been to a tutorial lesson

10. How could access to competent tutors be of assistance to you?

- I do not know

11. In what ways could the discussion between a tutor and a group of learners be of disadvantage to you?

- I do not have an appropriate answer.

12. What need to be done to be address the above?

- Tutors need to be work shopped to conduct tutorial lessons.

13. To what extent is social interaction between or amongst distance learners during tutorial lessons of assistance to you?

- I do not know

14. What need to be done to address shyness of some of distance learners which inhibits dialogue in some groups?

- Learners need to be given tasks to prepare and present.

15. In what way should tutoring be implemented to address secondary school teacher's needs related to outcomes-based education?

- Tutors need to facilitate learning rather than spoon-feed distance learners.

16. Would you like to add anything regarding tutoring in distance education?

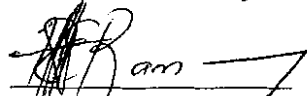
- Experts of distance education need to workshop the tutors before letting them take tutorial lessons.

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0978

TO WHOM IT MAY CONCERN:

Permission is hereby granted to Mr Sikhavhakhavha P.M. to use this information from the interview he held with me.

Yours Faithfully


Ram
Ramavivhana F.E.

MR RAMALIVHANA'S RESPONSES TO THE INTERVIEW

PART ONE : STUDENT COUNSELLING IN DISTANCE EDUCATION

1. What is student counselling

- In my opinion student counselling is an advice to the students particularly those students who have problems in their studies.

2. In what way do you benefit from counselling?

- It helps me in the selection of courses and in the selection of methods of learning.

3. How often is counselling conducted in the institution in which you are learning?

- It is rarely done

4. In what way do you benefit from the following activities of student counselling.

4.1. Study orientation and induction

- This gives me an opportunity to get to know about high education life and learning in this institution. This also helps me to choose the right field of study.

4.2. Analysis of study problem and strategies for success when repeating courses.

- It provides me with an opportunity on how to overcome some of learning barriers.

4.3. Training in reading skills

- It helps me in knowing how to deal with large amount of reading materials.

4.4. Preparation for examination

- It assists me in how to prevent stress when preparing examination.

4.5. Pre-courses counselling

- This does not exist in the institution where I am studying.

4.6. In-course counselling

- This persuades me to visit the library regularly and to write assignments.

4.7. Post-course counselling

- This does not exist

5. What need to be done to improve student counselling?

- I do not know

6. Do you want to add anything regarding student counselling in the institution on which you are studying?

- No

PART TWO: TUTORING IN DISTANCE EDUCATION

7. Who are tutors

- I think tutors are advanced students who teach or guide their fellow students in small groups.

8. In what way do you benefit from the manner in which general problems you encountered in the learning content are addressed during tutorial lessons?

- As sometimes it is difficult to understand well the written language, tutor helps students to understand the content of their courses. Their advance knowledge and information supplements the information the students get when they read.

9. How are problem of individual learners related to learning content addressed by tutors?

- Tutoring in small groups gives the tutors advantage of providing the students with individual attention.

10. How could access to competent tutors be of assistance to you?

- I could get the most important advice regarding the study of learning content and how to write assignments.

11. In what way could the discussion between a tutor and a group of learners be of disadvantage to you?

- When there is no trust between tutors and learners and when tutors lack the relevant information, tutorial lessons degenerate.

12. What need to be done by tutors to address the above?

Tutors need to master the content before they confront the students. They must plan their lessons thoroughly and there must be a mutual relationship between tutors and their learners.

13. To what extent in social interaction between or amongst you distance learners during tutorial lesson of assistance to you?

- The nature of interaction helps me a lot in writing my assignments.

14. What need to be done to address shyness of some of distance learners which inhibits dialogue in some groups?

- In order to prevent-shyness all students must be equally treated in their groups and they should be given room to express their view during contact sessions.

15. In what way should tutoring be implemented to address secondary school teacher's needs related to outcomes-based education?

- The learning groups should be of limited number of students and tutors must facilitate learning and not to spoon feed the students.

16. Would you like to add anything regarding tutoring in distance education?

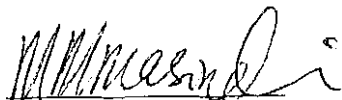
- Tutorial lessons should be monitored regularly by the lectures.

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TO WHOM IT MAY CONCERN:

Permission is hereby granted to Mr Sikhavhakhavha P.M. to use this information from the interview he held with me.

Yours Faithfully


Masindi M.M.

MR MASINDI'S RESPONSE TO THE INTERVIEW

PART ONE : STUDENT COUNSELLING IN DISTANCE EDUCATION

1. What is student counselling?

- It is an advice service that distance learners receive at colleges and universities.

2. In what way do you benefit from counselling?

- It is not easy for me to answer it

3. How often is counselling conducted in the institution in which you are learning?

- I do not know

4. In what way do you benefit from the following activities of student counselling?

4.1. Study orientation and induction

- I haven't heard of this

4.2. Analysis of study problem and strategies of success when repeating courses.

- I haven't heard of this

4.3. Training in reading skills

- It helps distance learners to know how to deal with large amount of reading material.

4.4. Preparation for examination

- This is never done

4.5. Pre-course counselling

- I haven't heard of this

4.6. In-course counselling

- I haven't heard of this
-

4.7. Post-course counselling

- I haven't heard of this

5. What needs to be done to improve student counselling?

- I do not know

6. Do you want to add anything regarding student counselling in the institution at which you are studying?

- No

PART TWO : TUTORING IN DISTANCE EDUCATION

7. Who are tutors?

- A tutor can be a teacher or any other person who directs the studies of a number of students whom he also meets separately.

8. In what ways do you benefit from the manner in which general problems are addressed during tutorial lessons?

- It is not easy for me to answer this

9. How are problems of individual learner related to the content addressed by tutors?

- It is not easy for me to answer this

10. How could access to competent tutors be of assistance to you?

- Competent tutors comes with good strategies to highlight the problems distance learners encounter in their learning situation.

11. In what way could the discussion between a tutor and a group learner be of disadvantage to you.

- We as distance learner may lack co-operation in the tutorial lessons.

12. What need to be done to address the above?

- The group should be composed of a small number of learners to enable tutors to pay attention to each of them.

13. To what extent is social interaction between or amongst distance learner during tutorial lessons of assistance to you?

- It could help to enhance co-operation among distance learners

14. What need to be done to address shyness of some of distance learners which inhibits dialogue in some groups.

- Tutors need to enhance co-operation amongst distance learners.

15. In what way should tutoring be implemented to address secondary school teachers' needs to related to outcomes based education?

- By encouraging respect towards each distance learner. Tutoring should enhance distance learner's participation in discussion.

16. Would you like to add anything regarding tutoring in distance education?

No

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0971

TO WHOM IT MAY CONCERN:

Permission is hereby granted to Mr Sikhavhakhavha P.M. to use this information from the interview, he held with me.

Yours Faithfully



Pharamela N.P

MR PHARAMELA'S RESPONSE TO THE INTERVIEW

PART ONE : STUDENT COUNSELLING IN DISTANCE EDUCATION

1. What is student counselling?

- I cannot define it.

2. In what way do you benefit from counselling?

- I haven't heard of this process

3. How often is counselling conducted in the institution in which you are learning?

- I haven't heard of this process.

4. In what way do you benefit from the following activities of student counselling?

4.1. Study orientation and induction

- I do not know

4.2. Analysis of study problem and strategies of success when repeating courses.

- My chance of passing is increased through this process

4.3. Training in reading skills

- It can help me to know how to deal with large amount of reading material.

4.4. Preparation for examination

- It may prevent stress when I prepare for exam

4.5. Pre-course counselling

- I haven't heard of it

4.6. In-course counselling

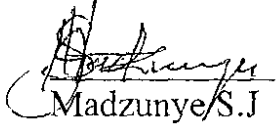
- I haven't heard of it

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Thohoyandou
0950

TO WHOM IT MAY CONCERN:

This is to confirm that permission has been granted to Mr
Sikhavhakhavha P.M. to use this information from the interview he held
with me.

Yours Faithfully


Madzunya S.J

MR MADZUNYE'S RESPONSE TO THE INTERVIEW

PART ONE : STUDENT COUNSELLING IN DISTANCE EDUCATION

1. What is student counselling?

- An advice service that student receive at college or university.

2. In what way do you benefit from counselling?

- Counselling assist me in the selection of course, and in the selection right methods of learning.

3. How often is counselling conducted in the institution in which you are learning?

- Counselling stretches from the beginning of the year to the beginning of the last quarter.

4. In what way do you benefit from the following activities of student counselling?

4.1. Study orientation and induction

- It helps me to choose the right field of study.

4.2. Analysis of study problem and strategies of success when repeating courses.

- It motivate me if I am not succeeding.

4.3. Training in reading skills

- It helps me to know how to deal with large amount of reading material

4.4. Preparation for examination

- I do not know

4.5. Pre-course counselling

- Counsellors show me strategies that enable me to study the learning material well.

4.6. In-course counselling

- It encourages me to write my assignment and enhances my level of studying.

4.7. Post-course counselling

- It serves as a tool to force me to do senior degrees.

5. What needs to be done to improve student counselling?

- It should be conducted by suitable people i.e. people who are skilled in this field.

6. Do you want to add anything regarding student counselling in the institution at which you are studying?

- This programme should be made know to every student. In the institution in which I am studying only few students are aware of this programme. I therefore urge this university to make it a point that all students benefit from this programme.

PART TWO : TUTORING IN DISTANCE EDUCATION

7. Who are tutors?

- Tutors are students who give lessons to their fellow students.

8. In what ways do you benefit from the manner in which general problems are addressed during tutorial lessons?

- By not allowing tutors passing any aspect without requesting clarification.

9. How are problems of individual learner related to the content addressed by tutors?

- Distance learner themselves may help each other in solving problem.

10. How could access to competent tutors be of assistance to you?

- Competent tutors guides me according to my needs

11. In what way could the discussion between a tutor and a group learner be of disadvantage to you.

-I may not co-operate in the discussion.

12. What need to be done to address the above?

- Tutors need to master the content before they confront the students.

13. To what extent is social interaction between or amongst distance learner during tutorial lessons of assistance to you?

- I do not know.

14. What need to be done to address shyness of some of distance learners which inhibits dialogue in some groups.

- Tutors need to strive to enhance co-operation amongst distance learners.

15. In what way should tutoring be implemented to address secondary school teachers' needs to related to outcomes based education?

- It should enhance our participation in discussion.

16. Would you like to add anything regarding tutoring in distance education?

- Tutoring in rural areas is not effective as it should be. Tutors for distance education are not workshop. As a result they meet their groups not knowing what to do. Some of the tutors are not approachable. Experts of distance education need to workshop the tutors before letting them take tutorial lessons.

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0971

TO WHOM IT MAY CONCERN:

I am hereby giving permission to Mr Sikhavhakhavha P.M. to use this information from the interview he held with me.

Yours Faithfully

JP Demana
Demana I.P

MR I.P. DEMANA'S RESPONSES TO THE INTERVIEW

PART ONE : STUDENT COUNSELLING IN DISTANCE EDUCATION

1. What is student counselling

- It is an act of exchanging ideas between students counsellors and distance learners.

2. In what way do you benefit from counselling?

- I do not know

3. How often is counselling conducted in the institution in which you are learning?

- It is rarely done

4. In what way do you benefit from the following activities of student counselling.

4.1. Study orientation and induction

- I have never attended study orientation and induction

4.2. Analysis of study problem and strategies for success when repeating courses.

- I do not know

4.3. Training in reading skills

- I do not know.

4.4. Preparation for examination

- I do not know

4.5. Pre-courses counselling

- It is never done.

4.6. In-course counselling

- I do not know

4.7. Post-course counselling

- I do not know.

5. What need to be done to improve student counselling?

- I do not know.

6. Do you want to add anything regarding student counselling in the institution in which you are studying?

- No

PART TWO: TUTORING IN DISTANCE EDUCATION

7. Who are tutors

- Tutors are students who give lessons to their fellow students.

8. In what way do you benefit from the manner in which general problems you encountered in the learning content are addressed during tutorial lessons?

- I do not know

9. How are problem of individual learners related to learning content addressed by tutors?

- Some of the problem may be addressed in the tutorial lessons by tutors for the sake of other distance learners.

10. How could access to competent tutors be of assistance to you?

- This broadens my approach of learning content.

11. In what way could the discussion between a tutor and a group of learners be of disadvantage to you?

- I do not know.

12. What need to be done by tutors to address the above?

- I do not know

13. To what extent in social interaction between or amongst you distance learners during tutorial lesson of assistance to you?

- I could realise that I am not the only one with problems after listening to problem of other distance learners.

14. What need to be done to address shyness of some of distance learners which inhibits dialogue in some groups?

- Shy learners need to be encouraged to speak and tutors need to make them realise that everybody's is unique and that each one has his or her unique problems. Tutors need to make groups small and manageable, give tips on how one can be assertive without being aggressive and build up personal confidence.

15. In what way should tutoring be implemented to address secondary school teacher's needs related to outcomes-based education?

- Tutoring needs to be done in groups. The learning in tutorial lessons need to have a bearing in life.

16. Would you like to add anything regarding tutoring in distance education?

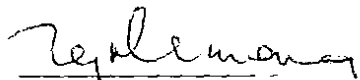
No

P.O.Box 38
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0971

TO WHOM IT MAY CONCERN:

I am hereby giving permission to Mr Sikhavhakhavha P.M. to use this information from the interview he held with me.

Yours Faithfully


Demana T.G

MRS T.G. DEMANA'S RESPONSES TO THE INTERVIEW

PART ONE : STUDENT COUNSELLING IN DISTANCE EDUCATION

1. What is student counselling

- It is a process whereby students are helped to cope with the academic and social life issues that, if not properly handled, can destroy the future of distance learners.

2. In what way do you benefit from counselling?

- I am advised socially, physically, intellectually and cognitively.

3. How often is counselling conducted in the institution in which you are learning?

- This stretches from the beginning of the year to the beginning of the last quarter through appointment.

4. In what way do you benefit from the following activities of student counselling.

4.1. Study orientation and induction

- I do not know as I have never attend study orientation and induction.

4.2. Analysis of study problem and strategies for success when repeating courses.

- I do not have an idea.

4.3. Training in reading skills

- I have never attended a course of training in reading skills.

4.4. Preparation for examination

- Here were are shown the wise way of budgeting time in our preparation for examination.

4.5. Pre-courses counselling

- It enables distance learners to make a wise choice of their learning fields.

4.6. In-course counselling

- I do not know

4.7. Post-course counselling

- The counsellor acts as a guide, mentor and inspirer.

5. What need to be done to improve student counselling?

- Counselling must be compulsory for all distance learners.

6. Do you want to add anything regarding student counselling in the institution on which you are studying?

- No

PART TWO: TUTORING IN DISTANCE EDUCATION

7. Who are tutors

- Tutors are instructors, guides and motivators who promote the learning process.

8. In what way do you benefit from the manner in which general problems you encountered in the learning content are addressed during tutorial lessons?

- I do not know

9. How are problem of individual learners related to learning content addressed by tutors?

- I do not know

10. How could access to competent tutors be of assistance to you?

- I do not know

11. In what way could the discussion between a tutor and a group of learners be of disadvantage to you?

- Individual problems may not be addressed effectively

12. What need to be done by tutors to address the above?

- Tutors need to master the content before they confront the students. They must guide learners in such a way that learners are attracted to their lessons.

13. To what extent in social interaction between or amongst you distance learners during tutorial lesson of assistance to you?

- I do not know

14. What need to be done to address shyness of some of distance learners which inhibits dialogue in some groups?

- I do not know

15. In what way should tutoring be implemented to address secondary school teacher's needs related to outcomes-based education?

- I do not know

16. Would you like to add anything regarding tutoring in distance education?

- Enough centres need to be allocated so that every distance learner can meet other distance learners without financial constraints.

Raluswielo Secondary School
P/Bag x 2214
Sibasa
0970
4 October 2005

TO WHOM IT MAY CONCERN

I want to confirm that I had an interview with Mr P.M. Sikhavhakhavha on matters related to his studies . I therefore am unreservedly granting him permission to use the information given to him in the interview.



T.A Ramutumbu

0822008166

MR T.A. RAMUTUMBU'S RESPONSE TO THE INTERVIEW

PART ONE : STUDENT COUNSELLING IN DISTANCE EDUCATION

1. What is student counselling?

- It is an advice to the students, particularly those who have problems in their studies

2. In what way do you benefit from counselling?

- In many ways

3. How often is counselling conducted in the institution in which you are learning?

- One gets counselled when one has made an appointment with lecturers or sometimes during group discussion.

4. In what way do you benefit from the following activities of student counselling?

4.1. Study orientation and induction

- This is not done

4.2. Analysis of study problem and strategies of success when repeating courses.

- Students are given procedures that they should follow when answering questions.

4.3. Training in reading skills

- It helps me to know how to deal with large amount of reading material.

4.4. Preparation for examination

- This is not done

4.5. Pre-course counselling

- This is not done

4.6. In-course counselling

- I do not know

4.7. Post-course counselling

- I do not know

5. What needs to be done to improve student counselling?

- Each distance learner needs to attend pre-course counselling in order to be assisted with the selection courses.

6. Do you want to add anything regarding student counselling in the institution at which you are studying?

- No.

PART TWO : TUTORING IN DISTANCE EDUCATION

7. Who are tutors?

- A tutor is an instructor, a guide and motivator who promotes the learning process.

8. In what ways do you benefit from the manner in which general problems are addressed during tutorial lessons?

- I do not know

9. How are problems of individual learner related to the content addressed by tutors?

- Some of the problem may be addressed in the tutorial lessons by tutors for the sake of other distance learner.

10. How could access to competent tutors be of assistance to you?

- I do not have a suitable answer

11. In what way could the discussion between a tutor and a group of learners be of disadvantage to you.

- I do not have a suitable answer.

12. What need to be done to address the above?

- Learners with the same problem could be grouped together.

13. To what extent is social interaction between or amongst distance learner during tutorial lessons of assistance to you?

- I do not have a suitable answer.

14. What need to be done to address shyness of some of distance learners which inhibits dialogue in some groups.

- I do not have a suitable answer.

15. In what way should tutoring be implemented to address secondary school teachers' needs to related to outcomes based education?

- I do not know.

16. Would you like to add anything regarding tutoring in distance education?

- No