DIDACTIC-PROFESSIONAL INSERVICE TRAINING AND DEVELOPMENT NEEDS OF SECONDARY SCHOOL TEACHERS IN A REGION OF THE NORTHERN PROVINCE

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DEDICATION

This study is dedicated to my late parents whose interest and concern about my schooling is still in my mind.

To the late ROBERT NKHANEDZENI SIBARA who encouraged me to enrol for the M.Ed. degree.

To my children, MUVHULAWA, MMBULAHENI, ALUWANI, TAKALANI, RUDZANI and MADALA, who missed my fatherly attention, but never stopped showing their love, understanding and concern.

To my wife SOPHIE who stood by me through thick and thin.

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SUMMARY

For effective teaching to take place in secondary schools, teachers need to be adjusted positively towards reality and need to possess a thorough knowledge of the learning material which they offer. Teachers can be helped to adjust positively towards reality and also possess a thorough knowledge of the learning material if their didactic professional needs are being satisfied through inservice education and training. Inservice education and training aims at improving teachers' competence and performance in the classroom situation.

This study aims at identifying the didactic-professional inservice education and training needs of secondary school teachers in the Northern Province. The following didactic-professional needs are identified:

- The need to improve secondary school teachers' academic competence.
- The need to update teachers' knowledge and skills to be able to cope with professional technological changes in the classroom.
- The need to appraise secondary school teachers' in the classroom situation.

The study also aims at determining the shortcomings of the strategies currently being used in the inservice education and training of secondary school teachers and also at finding strategies in order to improve the present situation.

The sample of this study comprises 244 randomly selected teachers, 105 randomly selected managers and all subject advisors (n=11) in the former Venda in the Northern Province.

Data was collected from the above sample, through the use of a questionnaire. A Likert type scale was used in the questionnaire.

In conclusion, some of the findings of this study are as follows:

- Appraisal of teaching activities in the classroom is fair or poor. It is recommended that teachers be appraised to help them to identify their weak points and also to give them advice on their teaching. Principals, deputy principals and departmental heads need to be involved in this process.
- Reflective practice of teachers is fair or poor. It is recommended that principals, deputy principals and departmental heads create conditions favourable to teachers to collaborate and cooperate in their schools.
- Panel inspection sometimes occurs or rarely occurs. It could be of help to teachers if inspectors of schools conduct panel inspection to help teachers to identify the areas they need to improve their teaching.
- Assistance to secondary school teachers by subject advisors sometimes occurs or rarely occurs. Again here it could be of help if subject advisors render their assistance to secondary school teachers to enable them to identify their weak points.
- Inservice training centres only cater for teachers teaching grade 12. It is recommended that inservice training centres cater for all teachers in secondary schools.
- Class visits by circuit managers sometimes occur or rarely occur. It is recommended that circuit managers visit classrooms to acquaint themselves with what is happening there.
- College programmes for improving professional competence are average or below average. It is recommended that college programmes for improving professional competence be improved in the Northern Province.
- Short courses and seminars at the inservice training centres are fair or poor. It is recommended that they be improved to help secondary school teachers with their didactic-professional needs.

Key words for indexing are: *organizational, didactic, academic and professional knowledge, skills and attitude of teachers, inservice teacher education, training, development, character and needs.*

OPSOMMING

Didakties-professionele indiensopleidings- en -ontwikkelingsbehoeftes van sekondêreskoolonderwysers in 'n streek van die Noordelike Provinsie. Doeltreffende onderrig in sekondêreskole is daarvan afhanklik dat die onderwysers positief teenoor die werklikheid ingestel is en 'n deeglike kennis het van die leerinhoud wat hulle onderrig. Onderwysers kan in hierdie opsig deur indiensopleiding, wat hulle didakties-professionele benoeftes bevredig, ondersteun word. Indiensopleiding beoog om onderwysers se bevoegdheid en prestasie in die klassituasie te verbeter.

Hierdie studie is ten aanvang op die identifisering van die didakties-professionele indiensopleidingsbehoeftes van sekondêreskoolonderwysers in 'n streek in die Noordelike Provinsie gemik. Die volgende sodanige behoeftes is geïdentifseer:

- Die behoefte om hulle akademiese bevoegdheid te verbeter.
- Die behoefte om hulle kennis en vaardighede ten einde by professioneel-tegnologiese veranderinge in die klaskamer aan te pas, op te gradeer.
- Die behoefte om die onderwysers in die klassituasie te takseer.

Die studie is daarna op die identifisering van tekortkominge in indiens-opleidingstrategieë wat tans met betrekking tot sekondêreskoolonderwysers gebruik word, gemik. Strategieë wat die huidige situasie kan verbeter, is ook ondersoek.

Die steekproef vir die ondersoek het uit 244 ewekansig-gekose onderwysers, 105 ewekansig-gekose skoolbestuurders (hoofde, adjunkhoofde en departementshoofde) en alle vakadviseurs (n=11) in die voormalige Venda in die Noordelike Provinsie bestaan.

'n *Ex post facto* veldondersoek is met behulp van 'n selfontwikkelde Likert-tipe vraelys onderneem.

Die kernbevindings en -aanbevelings van die ondersoek kom neer op:

- Die taksering van onderrigaktiwiteite in klaskamers is tans redelik tot swak. Dit word aanbeveel dat taksering beter benut word om onderwysers te help om swakpunte in hulle onderrig te identifiseer en om hulle in hierdie verband van advies te bedien. Skoolbestuurders behoort in hierdie opsig nou betrokke te wees.
- Die reflektiewe praktyk van onderwysers is tans redelik tot swak. Dit word aanbeveel dat skoolbestuurders omstandighede skep wat koöperatiewe samewerking tussen onderwysers in skoolverband kan aanmoedig.
- Paneelinspeksies vind tans nie bevredigend plaas nie. Sodanige inspeksies kan onderwysers help om leemtes in hulle onderrig te identifiseer.
- Ondersteuning deur vakadviseurs aan sekondêreskoolonderwysers is tans onbevredigend. Dit kan onderwysers help om swakpunte in hulle onderrig te identifiseer en op te los.
- Indiensopleidingsentra voorsien tans hoofsaaklik in die behoeftes van graad 12-onderwysers. Dit word aanbeveel dat hierdie sentra hulle programme op die behoeftes van alle sekondêreskoolonderwysers rig.
- Klasbesoek deur kringbestuurders is tans onbevredigend. Dit word aanbeveel dat hierdie bestuurders klaskamers besoek om hulle van die betrokke gebeure in hulle kringe te vergewis.
- Kollegeprogramme vir die verbetering van professionele bevoegdheid is tans redelik tot onbevredigend. Dit word aanbeveel dat die gehalte van hierdie programme in die Noordelike Provinsie verbeter word.
- Kortkursusse en seminare by indiensopleidingsentra is tans redelik tot swak. Dit word aanbeveel dat dit verbeter word om die betrokke onderwysers se didakties-professionele behoeftes te kan bevredig.

Sleutelwoorde vir indeksering: *Organisatoriese, didaktiese, akademiese en professionele kennis, vaardigheid en houding, sekondêreskoolonderwysers, indiensopleiding, -ontwikkeling en -behoeftes.*

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CHAPTER 1

1. ORIENTATION TOWARDS THE RESEARCH PROGRAMME

1.1 INTRODUCTION

This chapter starts with an orientation and the statement of the research problem. This is followed by the aim of the study, research methodology, field of research and significance of this research. The last part explains the arrangement of the report.

1.2 PROBLEM ORIENTATION

The Northern Province is not without the problem of underqualified secondary school teachers that need to be upgraded in one way or another. Duminy and Söhnge (1990:7) maintain that for effective teaching to take place, the teacher should be adjusted positively towards reality and should possess a thorough knowledge of the learning material or subject matter which he offers. Even the better qualified teachers need assistance for continual upgrading with regard to appropriate teaching approaches and the subject matter. This is supported by Stenhouse (1991:176) who states that curricular changes of real significance almost always involve changes in method and way of working. New learning material or subject matter and new teaching or learning approaches require special skills beyond those already possessed by those in the teaching profession.

According to Van der Stoep and Louw (1990:157), the school must provide for the educational demands and needs of society. In the Northern Province, this cannot be met if teachers are not helped to teach effectively in one way or another. This argument is supported by the following information from the March *DET Quarterly Returns* (1994) of five inspection areas in the Northern Province comprising 2437 secondary school teachers:

Academically, 66,1% of the teachers have grade 12 as their highest qualification. This information points to the fact that the majority of teachers are most probably, at least academically, not qualified for the teaching task.

Brookhart and Loadman (1992:347) maintain that teachers need the ability to apply specialized knowledge in different situations and contexts. This implies that teachers need to adjust teaching strategies as well as the learning material or subject matter to meet the needs of their different pupils. The teachers that are professionally underqualified to cope with this requirement at secondary school level somehow need assistance. Some of these teachers have been in the teaching field for many years. What was offered to them while still in the senior secondary phase is now being offered in junior, secondary or senior primary phases. Without upgrading programmes, these teachers can not be effective in the classroom situation. This is supported by Seakamela (1993:120) who states that the school personnel should constantly update their skills to cope with the new demands made on them.

In the draft White Paper on Education and Training (1994:11) it is stated that the curriculum, textbooks and teacher education were manipulated in the past in South Africa for ideological purposes and used as instruments of propaganda and indoctrination. As a result teachers who are already in the field will find it hard to implement the current curricula or new ones if they are not helped in one way or another.

Therefore this study attempts to address the following important problem:

- How can the didactic-professional training needs of secondary school teachers be met by means of inservice education and training in the Northern Province?

The research problem can be divided into the following subproblems:

- What are the didactic-professional inservice education and training needs (i.e. regarding subject matter, didactical and general organizational knowledge, skills and attitudes) of secondary school teachers?

- What is the state of affairs in the Northern Province at present regarding the provision of (pre-service and) inservice teacher education and training?

- What action needs to be taken in order to improve the nature and range of inservice teacher education and training in the Northern Province?

1.3 AIM OF THE STUDY

The aim of the study is as follows:

- To investigate the extent of didactic-professional needs of secondary school teachers in the Northern Province and to identify the different possibilities to meet the identified needs.

The objectives of this study are as follows:

- To identify the didactic-professional inservice education and training needs of secondary school teachers.

- To describe the provision of inservice education and training of teachers in the Northern Province.

- To determine the shortcomings of, and possible strategies for programmes being used in the Northern Province to satisfy these needs.

- To make recommendations as to how the didactic-professional needs of secondary school teachers can be addressed through inservice education and training.

1.4 METHODOLOGY

1.4.1 Literature study

Both secondary and primary sources were used to obtain information of secondary school teachers' development, formal training and non-formal

training. A DIALOG search was undertaken at the Ferdinand Postma Library of the Potchefstroom University for Christian Higher Education to identify suitable and recent sources to work from. The following key words or phrases were used:

- *Inservice teacher education, training, development, character and needs.*
- *Organizational, didactic, academic and professional knowledge, skills and attitudes of teachers.*

1.4.2 Empirical study

1.4.2.1 Method

The method used was a field survey by means of a structured questionnaire. The aim of the questionnaire was:

- to determine the needs of teachers with regard to inservice education and training;
- to determine the shortcomings of the strategies currently being used in the inservice education and training of secondary school teachers; and
- to find strategies in order to improve the present situation.

1.4.2.2 Population and sample

The population is all the secondary school teachers, managers (i.e. principals, deputy principals and departmental heads) and subject advisors in the former Venda in the Northern Province (cf. 4.3.3). The population number is approximately 2400; 244 teachers, 105 managers and all subject advisors (n=11) were used as a sample. Teachers and managers were selected at random.

1.4.2.3 Statistical techniques

Descriptive statistics were used (cf. 4.5 and 4.6). The assistance of the Statistical Consultancy Service of the Potchefstroom University for Christian Higher Education was sought.

1.4.3 Research procedure

The procedure followed in this research process is as follows:

1. Literature study (cf. Chapters 2 and 3).

2. Construction of questionnaire (cf. 4.3.1).

3. Pilot study: This was done to determine whether the questionnaire would enable the respondents to give the information required. 35 teachers and 5 managers were used in the pilot study.

4. Distribution of the questionnaire. This was done after the pilot study.

5. Analysis and interpretation of data (cf. 4.4 to 4.8).

6. Conclusion and recommendations (cf. Chapter 6).

1.5 FIELD OF RESEARCH

The field of research is didactics and teacher education.

1.6 SIGNIFICANCE OF RESEARCH

The research will be of help in removing some of the stumbling blocks in the didactic situation and teacher education.

1.7 ARRANGEMENT OF THE REPORT

The research is divided into the following chapters:

Chapter 1: Orientation towards the research programme.

Chapter 2: The didactic-professional needs of secondary school teachers.

Chapter 3: The present situation in the Northern Province regarding the provision of inservice education and training of teachers.

Chapter 4: Empirical study.

Chapter 5: Conclusion and recommendations.

1.8 SUMMARY

This chapter introduces the problem under investigation. The research aim and objectives were stated and the methodology of achieving the objectives were explained. A division according to chapters was made.

The next chapter (Chapter 2) will concentrate on the determination of didactic-professional needs of secondary school teachers.

CHAPTER 2

2. DIDACTIC-PROFESSIONAL NEEDS OF SECONDARY SCHOOL TEACHERS

2.1 INTRODUCTION

To enable secondary school teachers to teach effectively in the classroom situation, didactic-professional competence needs to be taken into consideration. Preservice training alone may not address these needs because of, amongst others, the knowledge explosion, technological changes and the ways in which preservice training is undertaken in general. It seems as if links between the theoretical input and the school practice is non existent during preservice training. This is supported by Shaw (1995:24) who states that, although the assessment of the student teacher's performance is shared by the school and the training institution during preservice training, the actual decision about the final pass or fail is often the sole province of the letter. Teachers need to know how to teach effectively in the classroom.

This chapter starts by giving some general aspects of the classroom situation. The last part concentrates on the description of didactic-professional needs of secondary school teachers.

2.2 SOME GENERAL ASPECTS OF THE CLASSROOM SITUATION

A classroom in each and every school is characterized by a teacher and pupils. Hargreaves (1993:89) sees the teacher as being concerned with the teaching of the subject matter being learned by the pupils. This implies that the teacher's action in the classroom is to help the pupils to engage in the learning act, performing relevant and meaningful learning tasks. To do this, the teacher needs knowledge of the subject matter, the learners and teaching methodologies.

According to Koehler and Grouws (1992:117), pupils' actions and behaviour are partly influenced by what the teacher does or says within the classroom. The influence of the teacher's deeds or words on the pupils may be either positive or negative. The teacher's deeds or utterances may be improved through, amongst others, appraisal and the improvement of his or her academic professional competence.

Koehler and Grouws (1992:110) are also of the opinion that in the classroom teachers need to structure, monitor and adjust activities for pupils to engage in. Their structuring, monitoring and adjusting of activities may, amongst others, be facilitated by professional technological changes in teaching that influence the way lessons are presented.

Yacker *et al.* (in Koehler & Grouws, 1992:119) point out that, in addition to giving problems to resolve in a classroom, much learning by pupils, or construction of knowledge takes place through social interaction with teachers and peers, as part of problem solving. Teachers may use various teaching skills and teaching strategies in their lessons to engage the pupils in learning the subject matter or learning material.

Fennema *et al.* (in Koehler & Grouws, 1992:20), who subscribe to the philosophy of cognitively guided instruction, maintain that in the classroom, teaching must be based on what each learner knows. Teachers in their teaching should apply the principle of individualization, amongst others (Duminy & Söhnge, 1990:19).

From the above discussion of what happens in the classroom situation, the following didactic-professional needs need to be taken into consideration:

- The need to improve secondary school teachers' academic competence.
- The need to update teachers' knowledge and skills to be able to cope with professional technological changes in the classroom.

- The need to appraise secondary school teachers in the classroom situation.

2.3 THE NEED TO IMPROVE SECONDARY SCHOOL TEACHERS' ACADEMIC COMPETENCE

2.3.1 Introduction

Farrell, Kerry and Kerry (1995:52) define competence as a criterion or measure by which a person can demonstrate that he/she is able to perform learned tasks both effectively and with understanding. Taking the above statement into consideration, academic competence may be defined as the ability to understand the learned learning material. In the previous chapter it was mentioned that underqualified teachers need to improve their academic qualifications for them to teach effectively in the classroom situation. Even the better qualified teachers need to improve their academic competence in order to keep up to date with curricular changes that keep on coming. For the purpose of this study the above heading could be divided into:

- The need to improve the academic competence of underqualified teachers.
- The need to provide academic competence required by curricular changes.

2.3.2 The need to improve the academic competence of underqualified teachers

Secondary school teachers are charged with the task of providing trained citizens of the Northern Province. The majority of children who graduate from secondary school usually enter the adult world where they are supposed to serve their community effectively without the knowledge acquired from tertiary institutions. The Northern Province needs a body of teachers who is academically competent in their subjects. Brookhart and Loadman (1992:348) complement this by stating that teachers need to demonstrate competence in the sense of academic ability.

Instead, the majority of teachers in the Northern Province can be regarded as being incompetent. This could be partly due to their academic qualifications. In the previous chapter mention was made of the fact that 66,1% of the

teachers in secondary schools of the five inspection areas have standard 10 as their highest academic qualifications. Programmes need to be designed and implemented to encourage these teachers to improve their academic competence.

Van der Stoep and Louw (1990:205) maintain that "content which was previously considered suitable for the senior secondary phase of the school is now being taught in the junior secondary or even senior primary phase". For example, some of the content of the syllabus of grade 12 Geography of 1975 is now offered in grade 10.

It is of no use to provide better textbooks in secondary schools without improving secondary school teachers' academic competence first. It is like equipping a hospital with good medicines and better technological equipment with only the nurse in charge.

The teacher's command of the subject matter or learning material coupled with his professional competence could determine the degree in which children's attention is drawn to the learning activity. Duminy and Söhnge (1990:6) complement this by maintaining that "[e]ducative teaching and learning are guided by academically and professionally trained teachers". The statement could imply that academic and professional competence of teachers complement one another during educative teaching and learning. If the teacher is unfamiliar with the subject matter, the child's interest in learning could be reduced. As a result of this the authority of the teacher in the classroom may be challenged by pupils. Pupils may resort to misbehaviour as a sign of rejecting the teacher's authority. Hoy and Miskel (1991:77) see authority as something that is legitimised by a value that is held in common by a group.

A good command of the learning material by the teacher may increase the involvement of the pupils in learning and also reduce the tension that may arise as a result of lack of command of the subject matter. The above statement is supported by lessons in winter schools of Mbeu bookshop when teachers with good command of the subject matter coupled with better

professional training are teaching. It seems as if pupils find these lessons helpful as many go there voluntarily.

Secondary school teachers need to be constantly enriched with subject matter or learning material internally and externally in order to teach effectively in the classroom in the Northern Province. Without this their teaching can not be effective. Most content is not as directly or concretely available as it was in the past (Van der Stoep & Louw, 1990:204). It seems as if the improvement of teachers' academic competence need to be an ongoing process for the teachers to be effective in the classroom. Without this pupils could find it hard to follow what is being taught.

According to Brookhart and Loadman (1990:350), a good teacher knows the learning material and understands in a way that can be taught effectively to the pupils. This statement implies that knowledge of the subject matter and better professional training could make the teacher effective in the classroom. Fraser, Loubser and Van Rooy (1993:15) maintain that the teacher must also have sufficient knowledge of and insight into the meaning and cultural value of the aspects of reality which are taught as the learning content of the curriculum.

In the Northern Province opportunities need to be created in order to equip teachers in the secondary schools to accomplish their teaching successfully. The teachers need to direct the child towards adulthood and the rest of reality in the school by communicating or teaching with the view to unfold the reality to the child (Duminy & Söhnge, 1990:7). This could help the teachers to overcome fear of learners and to develop confidence in themselves. Their authority in the classroom may also be restored as a result of the command of the subject matter which could supplement their professional training.

All the above emphasize the need for the secondary school teachers to improve their academic competence for them to be competent in teaching the subject matter to the pupils in the teaching learning situation.

2.3.3 The need to provide academic competence required by curricular changes

When innovations are effected to the curriculum, new competence required by the new subject matter and new approaches also come into being. Provision of that competence needs to be made available to secondary school teachers. Without that competence, the curriculum could fail to serve its purpose. The teachers in secondary schools could be reduced to laughing stock in front of pupils, especially those teachers who are academically underqualified. Teachers need to have the appropriate professional skills to teach their subject to children of different ages, abilities, aptitudes and background (Hargreaves, 1989:73).

Stenhouse (1991:170) sees innovation of the curriculum as the process that suppresses acquired competence of the teacher and demands the development of new ones. This statement supports what has been said in the paragraph above, that any change in curriculum should be accompanied by the provision of opportunities and support for teachers to acquire new competence. New competence causes the teachers to be in command of the new learning material. Without that competence, the teachers could find it hard to conduct a lesson in the classroom using new subject matter. Pupils could also find it hard to follow what is being taught in the classroom.

According to Stenhouse (1991:168), changes that are effected in the curriculum could threaten control and order in the classroom. Teachers may be seen as being incompetent as a result of the suppression of the competence of teachers brought about by curricular changes. Pupils may also resort to misbehaviour in the classroom. This implies that the teaching learning process in the classroom could be affected by suppression of competence of teachers brought about by curricular changes.

Ways need to be found to enable the practising teacher to acquire that new competence. Any curricular change implies a new way of looking at subject matter if teachers are really to change what they do (Easen, 1989:8). New competence may enable the teachers to teach effectively and also to minimize the chance of threat to control and order in the classroom.

2.4 THE NEED TO UPDATE TEACHERS' KNOWLEDGE AND SKILLS TO ENABLE THEM TO COPE WITH PROFESSIONAL TECHNOLOGICAL CHANGES IN THE CLASSROOM

2.4.1 Introduction

We are living in a world of technology. Lesson plans of teachers are, amongst others, influenced by technological changes. Teachers need to be conversant with new equipment to access knowledge both for their own use and to direct their pupil's investigation (Montgomery & Hadfield, 1989:42). This implies that strategies and programmes need to be found to update teachers' knowledge and skills to enable them to cope with technological changes. According to Montgomery and Hadfield (1989:42), the availability of television, radio, video camera and recorder and home computer has affected the way children respond in class and teachers will need to demonstrate flexibility in adjusting to this change.

2.4.2 The need to cope with professional technological changes

Teachers need to learn the skills of operating the above mentioned equipment as most schools with electricity in the Northern Province have some of that equipment. Nelson, Palonsky and Carlson (1990:176) regard technological skills as skills that include techniques useful in handling and working with the results of technology. It is of no use to equip the schools with photocopiers, overhead projectors, video machines, slides projectors, computers and other equipment without providing the teachers with the knowledge of how to operate that apparatus. Secondary school teachers need to be given a chance to learn how to operate that apparatus with the assistance of experts to enhance their teaching.

According to Petty (1993:268), modern photocopiers can, for example, reproduce newspaper articles, including photographs. Teachers need knowledge and skills of making photocopies that can serve as handouts to enhance their teaching.

Lessons may be conducted with the aid of overhead projectors. According to Petty (1993:209), teachers can present complicated overhead projector transparencies that they could never have time to prepare on the blackboard

during class. The presentation of overhead projector transparencies is only possible if the teachers have the knowledge of operating the overhead projectors.

Teachers may also use a video to conduct lessons. Duminy and Söhnge (1990:181) maintain that during a video lesson, the teachers should, among other things, interrupt the video to emphasize certain aspects of the video cassettes.

According to Petty (1993:284), in a lesson slides can be projected on to any reasonably white object but a proper screen is best. Here again, teachers, may need knowledge and skills of projecting slides on to the white object or the proper screen.

Instructions may be designed with the aid of a computer. Duke (1990b:105) maintains that computer based instruction encompasses two primary functions, viz. computer assisted instruction and computer managed instruction. According to Duke (1990b:105), in computer assisted instruction learners interact directly with micro computers, freeing teachers to provide special assistance to individuals. This implies that computer assisted instruction enables teachers to practise individualized teaching in the classroom. Computer managed instruction helps teachers to plan, monitor student learning, analyze test results, schedule activities and store learners' records (Duke, 1990b:105).

The above explanation emphasizes the importance of updating teachers' knowledge and skills to be able to cope with technological changes. Teachers need to be equipped with skills of operating and using all the above equipment to improve teaching and learning activities.

2.5 THE NEED TO IMPROVE SECONDARY SCHOOL TEACHERS' PROFESSIONAL COMPETENCE

2.5.1 Orientation

Oldroyd and Hall (1991:10) regard competence as knowledge and skills, the possession of which is believed to be relevant to the successful practice of

teaching by the teachers. This implies, among others, that professional competence enables the teacher to arrange and teach the subject matter in a way that is accessible to the pupils. In the Northern Province there is a need to improve the professional competence of both underqualified and better qualified teachers. Seakamela (1993:6) regards professionally underqualified teachers as those serving teachers falling below M+3 category. According to the information from March DET Quarterly return of 1994 of five inspection areas in the Northern Province comprising 2437 secondary teachers, 11,2% teachers have either a junior secondary teachers certificate or a primary teachers certificate; 56,6% have either a secondary teacher diploma or a primary teachers diploma and the rest (32,3%) have either a degree plus a diploma or an integrated degree.

Without the improvement of professional competence, the lessons of professionally underqualified teachers could leave much to be desired because of their not being well grounded in the methods and other teaching skills. Their teaching could fail to involve the pupils in the learning activity. Brookhart and Loadman (1990:330) complement this by maintaining that "an educated person knows and understands for himself or herself". A good grasp of the content which is not coupled with better professional competence may not serve a purpose in the teaching profession.

Hargreaves (1993:90) also maintains that in the classroom teachers make many decisions with in most cases little time for deliberation. This implies that for them to make decisions that will not hamper learning activity, they should be professionally well trained. Better professional training may help them to know the children for whom the decisions are made.

Secondary school teachers need to be given a chance to improve their professional competence while they are in service. Duke (1990a:132) complements this by seeing professional development as the process by which competent teachers achieve higher levels of professional competence and expand their understanding of self and professional competence.

According to the Department of Education's draft White Paper on Education (1994:11) in South Africa, in the past, "Official policies on examination and teaching methods have encouraged the memorization of large amounts of information and discouraged both teachers and students from developing their initiative or critical thinking". This statement indirectly supports the idea of the need for improvement of secondary school teachers' professional competence in the Northern Province which is also part of South Africa. Teachers may need to be trained to develop their initiative and critical thinking. Improvement of the teachers' professional competence is necessary for them in order to be grounded in teaching skills, teaching strategies, evaluation skills, decision making skills, knowledge of the child and organizational skills. All these will be discussed next.

2.5.2 Teaching skills

Teaching skills are skills that may promote teaching and learning activities if applied correctly. The skills could enable creative thinking and discourage unnecessary memorization of learning material. No secondary school teacher can teach effectively in the classroom situation without the knowledge of teaching skills. Teachers may need, amongst others, skills of individual teaching and individualized teaching, differentiated teaching and motivation. The skills may help to attract the pupils to become involved in the learning of the subject matter being taught. The teacher may be able to pay undivided attention to the pupils as individuals. This study will concentrate on the following teaching skills to highlight the importance of teaching skills:

- Individual teaching and individualized teaching.
- Differentiated teaching.
- Motivation.

2.5.2.1 Individual teaching and individualized teaching

- **Individual teaching**

Fraser *et al.* (1993:65) regard individual teaching as teaching which takes place when a single learner is given the full and undivided attention of a

teacher. According to Hofmeister and Lubke (1990:3), individual teaching is applicable when teachers facilitate pupils' engagement in learning tasks efficiently and provide rewarding social and personal experience. Teachers need to know how to apply individual teaching in the classroom to help pupils in their learning of the subject matter or learning material. The improvement of teachers' professional competence aims at, amongst others, enabling teachers to apply individual teaching to help pupils in their learning of the subject matter or learning material.

- **Individualized teaching**

Various definitions of individualized teaching are given by various people. Duminy and Söhnge (1990:22) see individualized teaching as teaching based on the idea that every child must be assisted to develop according to his own capabilities. Fraser *et al.* (1993:65) define individualized teaching as teaching that attempt to develop and to allow the development of the unique talents and abilities of each learner as effectively as possible.

Individualized teaching enables the teacher to take cognisance of individual differences amongst pupils, i.e. difference in ability, family background and personality. Some children come from well educated families that guide them in their learning activity after school hours. Others have the ability to grasp the learning material quickly. Individualized teaching enables the teachers to know what to do with children from well educated families and those that grasp the learning material quickly while they are busy with the slow learners.

When individualized teaching is applied in the classroom, children are allowed to learn at their own pace. Hoover (1989:39) complements the above statement by maintaining that during individualized teaching, classroom assignments and other expectations are made specific and appropriate to individual needs, interest and abilities.

The disadvantage of individualized teaching is that children who are slow learners could find it hard to cover the syllabus in one year. But if

individualized teaching is used together with other skills, learning activity in the classroom may be promoted.

2.5.2.2 Differentiated teaching

Fraser *et al.* (1993:65) see differentiated teaching as teaching that meets the needs and abilities of certain heterogeneous groups. Pupils differ in as far as their abilities, attitudes and motivation are concerned. When using differentiated teaching, teachers are able to classify their pupils according to their abilities, attitudes and motivation. The pupils with high abilities and a positive attitude toward learning could take high grade subjects while those with low abilities and negative attitudes could take standard grade subjects. The classification is not rigid because abilities and attitude are not static. They keep on changing. The improvement of professional competence of teachers may also aim at enabling the teachers to apply differentiated teaching in a way that could promote the learning activity.

2.5.2.3 Motivation

Vrey (1990:225) defines motivation as the intensity of the pupil's involvement in learning. The term refers to the degree of desire for participation in the learning process. Motivation can be divided into extrinsic and intrinsic motivation.

Extrinsic motivation comes from outside the learner, e.g. in the form of reward by a teacher. Fraser *et al.* (1993:61) sees extrinsic motivation as motivation supplied by stimuli external to the learner. Its influence in the learning process usually does not last long. According to Covington (1992:20) once, the reward is removed there is no longer any particular reason for the pupils to learn.

Intrinsic motivation comes form within the learner. Covington (1992:20) defines intrinsic motivation as the desire to become more effective as a person. This usually has a longer lasting influence on the learning process.

The teacher needs to understand the influence of both these types of motivation on the learning process in order to teach successfully. Curzon

(1990:200) maintains that "the teacher has the task of creating a learning environment which relates the learner's activity to his or her needs and aspiration, so that his or her sense of self improvement is heightened". The teacher cannot create this learning environment if he does not know how to use both these types of motivation. The teacher needs the knowledge of using the pupil's intrinsic motivation in a way that promotes learning activity in the classroom.

According to Curzon (1990:20), the teacher needs to use teaching strategies that take, amongst others, the following matters into account if he or she is to take the aspect of motivation into consideration:

- The individual learner's motivation and goal should be understood and the aim of study should be clearly defined and explained to him or her.
- Goals that are too hard or too easy to attain are neither motivating nor reinforcing when attained.
- Short term goals should be explained in relation to long term achievement.

2.5.3 Teaching strategies

According to Fraser *et al.* (1993:144), different teaching strategies exist, depending on individual view points and background. These strategies are not without some disadvantages. The improvement of teachers' professional competence enables the teachers to find ways that make these strategies effective in the classroom situation. For the purpose of this study not all teaching strategies given by different people will be discussed. Attention will be given to only four of the six teaching strategies listed by Van der Stoep and Louw (1990:171); the other two have been dealt with indirectly in other sections. In this chapter, team teaching, project teaching, conversational teaching and exemplaric teaching, and three others according to other people who will be mentioned when these strategies are discussed, i.e. co-operative learning, problem solving and investigation.

2.5.3.1 Team teaching

Van der Stoep and Louw (1990:188) define team teaching strategy as the strategy where two or more teachers accept the responsibility for teaching a specific group of children. According to Van der Stoep and Louw (1990:188), team teaching is the outcome of an attempt to improve the quality of teaching and utilises the service of available teachers more economically and more effectively. The strategy enables the teachers to teach only the learning material in which they are regarded as specialists. The strategy has advantages and disadvantages.

* **Advantages of team teaching**

Van der Stoep and Louw (1990:189) list the following as advantages of team teaching:

- It provides for specialization by teachers which in turn enables the school to make the most effective use of all the teachers' abilities at different levels of the school programmes.
- It satisfies the demand of individualization on the side of the teacher.
- The learning world of the child is extended to include the world outside the classroom, thereby providing the child with fuller and richer experience.
- The personal contact between teacher and pupils remains close because there is a possibility that the same group of teachers will teach the same group of pupils right through their secondary school career.
- The co-operation between teachers, and especially their joint planning of the content, create excellent opportunities for the integration of different school subjects.

* **Disadvantages of team teaching**

Van der Stoep and Louw (1990:190) regard, amongst others, the following as disadvantages of team teaching:

- Team teaching is closely associated with certain forms of ordering learning content, e.g. linear and chronological ordering form. If there is faulty reconciliation between the ordering of the learning material and the different forms of presentation during the planning of a lesson, the teaching attempt easily becomes ineffective.

- Organizational matters demand considerable time and energy of the participating teachers.

- Nobody is really responsible for the progress or failure of individual pupils.

2.5.3.2 Project teaching

Petty (1993:208) regards a project as a task or set of task for pupils to complete - usually individually but sometimes in a group. This implies that project teaching can be defined as teaching in which a task or set of tasks is given to pupils to complete – usually individually but sometimes in groups. The teacher may use assignments and homework as projects to be completed.

* **Advantages of project teaching**

Van der Stoep and Louw (1990:192) list the following as advantages of project teaching.

- As far as content is concerned, the principle of integration comes into its own and as far as the pupils are concerned, the learning experience is meaningful because the content is true to reality and life outside the school.

- It promotes the acceptance of responsibility and it also exercises and forms aspects as accurate observation, critical judgement, reasoning, initiative, co-operation in a team or group, respect for the opinion of others, perseverance, openness to criticism, creativity and especially self criticism.

- It provides for the demand for individualization.

- It demonstrates the complexities of the living world and especially the world of work.

- It takes account of the discovery aspects of learning and provides for a definite motive for the course of the learning activity.

* **Criticism directed against project teaching**

Van der Stoep and Louw (1990:193) list, amongst others, the following as criticisms directed against project teaching.

- The introduction of a project as a teaching strategy is hindered by the traditional organization of the classroom. It is also in conflict with a fixed school time table.

- As far as the selection and ordering of the content is concerned, the extremes of autocratic planning by the teacher or unlimited freedom of the pupils may create serious problems.

- The curriculum will not be dealt with fully and certain short comings in the design of learning experience can occur. The task of identifying and righting these short comings is difficult.

- When choosing a project, over estimation of the abilities of pupils by teachers poses a real problem.

- The principle of group work has its own difficulties and dangers. The most real danger is that the less gifted child loses himself or herself in the group without many or any demands being made on him or her or that he or she makes very little contribution towards the project.

- The weak teacher hides behind the activities of his or her pupils in an attempt to escape from his or her own learning responsibilities.

It makes demands on a great deal of research material as far as both teachers and pupils are concerned. In certain circumstances the necessary and relevant material is difficult to collect.

- Pupils who are used to project teaching find it difficult to change to a school where other forms of teaching are prominent.
- It is time consuming and often expensive.
- Teaching by means of projects sometimes inclines towards superficiality.

2.5.3.3 Conversational teaching

According to Van der Stoep and Louw (1990:195), "Conversation is revealed as a didactic strategy in two main general branches, namely the learning conversation and the class conversation".

*** The learning conversation**

Here the emphasis is on the interaction taking place between teachers and pupils. Van der Stoep and Louw (1990:195) describe it as the communication between the teacher and the pupils where the teacher leads the learning activities. The method used to teach the subject matter is the question and answer method. This method is also known as the Socratic method or the developmental method.

In the question and answer method the teacher asks the questions to the pupils. This enables the pupils to understand and learn the subject matter when answering the questions. Pupils may also ask questions to the teacher in areas where they are having difficulties. Duminy and Söhnge (1990:63) see the question and answer method as the method that makes both teachers and pupils active partners in the teaching learning situation. The teacher can see how far the pupils have internalized the subject matter through this method. But the teacher may fail to direct his questions to all the pupils.

*** The class conversation**

According to Van der Stoep and Louw (1990:198), "Class conversation is conducted between pupils amongst themselves but under the control of the teachers". The view of the pupils on the subject matter is regarded as significant in class conversation. Its success could depend on the abilities, attitude and motivation of the pupils. Duminy and Söhnge (1990:64)

complement the above statement by maintaining that in a discussion one must be willing to expose one's idea to criticism and even rejection. This implies, among others, that the strategy may not yield good results. The syllabus could also not be covered when the strategy is used excessively because time could be wasted on some of the topics being discussed.

2.5.3.4 The exemplaric teaching strategy

According to the OED (1993:515), one meaning of the word *exemplaric* is "model". Taking this meaning into account, the exemplaric teaching strategy could be regarded as the strategy in which lessons are conducted by means of models or examples. The methods used in this strategy are textbooks, demonstrations, experimenting, question and answer and drill work. The above mentioned methods are not without some disadvantages. This can be made clear by discussing the textbook method, demonstration, experimenting and drill work as question and answer method has already been discussed under the learning conversation.

When the textbook method is used, the subject matter is read from the textbook and explained to the pupils by the teacher. Depending on the goals, this method could be considered in some instances but not in all cases. Teachers may fail to draw the attention of the pupils when using this method in all cases. Duminy and Söhnge (1990:72) complement the above view by stating that the textbook method does not stimulate independence and self activity in pupils. Duminy and Söhnge (1990:73) list the following disadvantages for the textbook method:

- Where a textbook is followed too closely, it can result in the pupils tending to accept the contents of the one textbook as the final authority on the subject. The teachers need to point out to pupils that often more than one opinion or interpretation is possible on a cardinal point.

- Where the daily classroom activities rest so heavily on a class textbook there may be the tendency to display too much faith in the written word.

- The content of the textbook may not always coincide exactly with the syllabus that has to be covered.

- Little or no provision is made for individual differences.

- Some textbooks appearing on the market are poor in as far as the subject matter is concerned. The textbook method places a heavy responsibility on the teacher to make a thorough study of the new textbook for the subject he is teaching.

- The intonation, the facial expression, the gestures, the illustration of the teacher in the classroom can never be reproduced in book form.

Even though the textbook method has the above disadvantages, it may produce good results if used in conjunction with other methods such as question and answer, demonstration and experimenting.

In demonstration the learner is given the opportunity to observe how the teacher has planned and completed a certain task or project. The statement is supported by Petty (1993:127) who sees demonstration as showing how by means of example. Demonstration is not without some disadvantages. There are learners who want to embark on the project on their own. The teacher may bore these pupils by his demonstration.

Van der Stoep and Louw (1990:93) see experimenting as the method that deals mainly with the discovery of reality by means of specific examples in order to arrive at a generally valid pronouncement concerning the phenomenon or object. The method is mostly used in subjects such as Biology, Geography and Physical Science.

Van der Stoep and Louw (1990:93) also maintain that the mere fact that a child understood a certain content is no guarantee that his or her insight will be lasting. Drill work enables the child to internalize the facts or skills after they have understood the facts or skills. But to the average pupils, drill work becomes an unchallenged method if used excessively. Pupils may become

uninterested in learning the subject matter and involve themselves in mischievous behaviour because of boredom while the teacher is teaching.

2.5.3.5 Co-operative learning strategy

Slavin (1996:200) regards co-operative learning as the strategy in which pupils work in small groups to help one another master academic content. The methods used in co-operative learning strategy share the idea that learners work together to learn and are responsible for one another as well as for themselves (Slavin, 1996:200). Slavin (1996:201) also mentions the fact that co-operative learning methods emphasize the use of team goal and team success that can only be achieved if all members of the team learn the objectives being taught. Secondary school teachers need knowledge of using co-operative learning in their teaching to promote the learning activity of the pupils.

According to Gelderblom and De Kock (1995:59), co-operative learning changes the role of the teacher from the bearer and interpreter of knowledge to that of skilled observer, interpreter and facilitator of the thinking process, group dynamics and learning outcomes. Gelderblom and De Kock (1995:59) also maintain that learners are no longer recipients of the teacher's assumed superior knowledge and insight, but are actively involved in and accountable for their own learning when co-operative learning strategy is used in the classroom.

Gelderblom and De Kock (1995:59) see co-operative learning as being based on the following principles:

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

The advantage of co-operative learning is, amongst others, to relate what is happening in the classroom with the outside world. Gelderblom and De Kock

(1995:58) see co-operative learning strategy as confronting school leavers with real life situations where teamwork, effective communication and co-ordination and the division of tasks among people to achieve mutual goals are emphasized.

The disadvantage of co-operative learning is, amongst others, that pupils who do not want to share their ideas with others may find it hard to cooperate with others. According to Gawe (1996:37), this problem may be overcome if teachers monitor the progress of both individuals as well as that of the group as a whole.

2.5.3.6 Problem solving strategy

The problem solving strategy is the strategy of finding or constructing a solution to a task for which no ready solution is at hand (Montada, 1994:4719). "A problem arises when one has a goal - a state of affairs that one wants to achieve - and it is not immediately apparent how the goal can be attained" (Montada, 1994:4720). Teachers need knowledge of applying the problem solving strategy in their teaching to promote the learning activity of the pupils.

The aim of the problem solving strategy is, amongst others, to help pupils 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 (Opwis & Spada, 1994:4722). This implies that the problem solving strategy aims at, for example, preparing the learners for the adult world where they can serve their community to the best of their abilities. According to Potthoff, Yeotis, Butel, Smith and William (1996:180), business today seeks employees who are able to work with others to solve problems.

The problem solving strategy is also not without some disadvantages. Only learners who are creative thinkers may be interested in the problem solving strategy. This can be overcomed by putting relevant and appropriate problems to the learners.

2.5.3.7 Investigation/inquiry

According to the OED (1996:784), one meaning of inquiry is "exploration". This implies that the investigation or inquiry strategy may be defined as the strategy in which learners learn through exploration. Teachers need knowledge of involving pupils or learners in learning the learning material through the investigation or inquiry strategy.

Duggan, Johnson and Gott (1996:461) see investigative work as a distinct type of practical work in school science, characterized by the fact that an answer to a question cannot be taken for granted, and although the pupils may speculate or hypothesize about what the solution might be, they will need to carry out a practically based investigation or inquiry. According to Duggan *et al.* (1996:461), the question which the learner or pupil is invited to answer is either given to the pupil or developed by the pupils from a more open question.

Investigation strategy is also not without some disadvantages. There are learners who do not want to involve themselves with the investigation process. According to Vakalisa (1996:15), this could be changed for the better if every learner in the classroom is afforded an opportunity to make an observation of what is being studied so that misconceptions can be detected and corrected.

2.5.4 Evaluation skills

Duke (1990b:112) defines evaluation as a process for obtaining information on which to base educational decisions. Teachers need evaluation skills to help pupils develop their abilities for them to serve their community well when they join the adult world. Evaluation programmes should be directly geared towards enabling each pupil to develop his potential within an educational frame-work (Duminy & Söhnge, 1990:112).

Duke (1990b:113) sees evaluation information as the information which may be used by teachers to address at least five types of decisions in the instructional domain, expressed in the following questions:

- Are pupils able to benefit from instruction?
- Do pupils understand what they learn?
- Are pupils making sufficient progress towards desired learning goals?
- Have pupils accomplished what was expected of them?
- To what extent has teaching been effective?

According to Duke (1990b:114), three major ways of assessment are:

- teacher made tests
- external tests
- classroom performance observation.

Examples of teacher made tests are class tests and examinations set by teachers. The questions of these tests are composed of essay types, completion types and multiple choice types. According to Duminy and Söhnge (1990:118), marking essays takes much time. This view does not imply that essay questions are not essential. Completion types, match types and true or false types are known as objective questions. Duminy and Söhnge (1990:125) prefer to call them objective questions because they need distinct and clear cut answers. Objective questions are difficult to set and easy to mark. Improvement of teachers' professional competence could help the teacher to vary his or her questions when setting the tests.

Duke (1990b:117) regards external tests as test that are frequently referred to as standardized tests, meaning that they are methods for obtaining evaluation under uniform procedures. According to Duke (1990b:117), external tests are used to determine which pupils can graduate from secondary school.

Teachers may use classroom assessment or performance observation to assess pupils. According to Duke (1990b:119), classroom assessment may involve such activities as classroom practice, conferencing, homework, teacher questioning and pupils' questions. Teachers may use the above activities to assess the pupils' progress. The disadvantage of the classroom

assessment is that some pupils do not participate fully in class activities. Secondly, teachers may fail to direct their questions at all the pupils. Airasian (1995:292) also maintains that because teachers derive their professional satisfaction from their instructional success, it may be hard for them to observe and judge objectively.

2.5.5 Decision making by the teachers

Teachers, time and again, make decisions that affect a pupil's life. This is supported by Wheldall and Glyn (1989:49) who say that children are clearly influenced by what teachers say. These decisions may have positive or negative effects in the teaching learning process.

According to Fennema and Franke (1992:156), decisions that teachers make in the classroom are, amongst others, decisions to modify their plans, to call on a given child for an answer, to reward or reject certain answers, to discipline an untruly child, to encourage a shy child and to speed up or slow down a lesson. All the above mentioned decisions may have a positive or a negative effect.

For teachers to teach successfully they must strive for decisions that have positive effects on the teaching learning process. Van der Westhuizen (1991:75) complements this view by maintaining that decisions should be co-ordinated to achieve a particular objective. Teachers should always be impartial and fair when solving the pupils' problems. This builds a sense of mutual trust between teachers and pupils. Good professional competence of teachers may help them to make decisions that have a positive effect on the teaching learning process.

2.5.6 Knowledge of the child

Brookhart and Loadman (1993:350) maintain that the teacher needs to adjust instruction to meet the need of his many different pupils. A teacher - may find it hard to adjust his teaching if he lacks knowledge of the child. Each child is unique. Pupils differ in abilities, family background and the environment from which they come. All these influence the way and pace at which the children

learn. This is supported by Griesel, Louw and Swart (1993:28) who maintain that "it is a misconception to believe that a specific group of children in a specific class is homogeneous and that the children therefore can be instructed in exactly the same way".

Griesel *et al.* (1993:26) are also of the opinion that each child needs security and safety. The teacher therefore needs to create a situation characterized by this in the classroom. By so doing he will be able to create a climate for the child conducive to learning.

2.5.7 Organizational skills

Teachers need knowledge of organizational skills. The skills help them a great deal in the classroom situation. No teacher can teach effectively without this knowledge. This can be exemplified by the following two groups of organizational skills, according to Dunne (1993:90), as the others (skills of organizing teaching strategies) have already been dealt with under teaching strategies:

- Skills of organizing pupils in the classroom.
- Skills of creating an ethos or an environment conducive to learning.

2.5.7.1 Skills of organizing the pupils in the classroom

Wheldall and Glyn (1989:57) maintain that "seating arrangements are some of the most influential ecological variables affecting classroom behaviour, and can also be relatively altered by the classroom teacher". In the classroom situation in secondary schools, a need may arise to group pupils according to aptitude, sex or age. According to Gawe (1996:37), the classroom may be organized to encourage co-operation among learners. Teachers need to know when to do this. For example, teachers may do this when they are busy with the principle of individualization, principle differentiation or when they want to eradicate misbehaviour in class. This is done in order to promote learning activities.

2.5.7.2 Skills of creating an ethos or an environment conducive to learning

Teachers need to create conditions conducive to learning within the classroom situation. This may be achieved through, amongst others, organizing the learning material, learning strategies and/or opportunities, communication in the classroom and managing and organizing learning environment. Only skills of organizing communication in the classroom and organizing and managing the learning environment will be dealt with here as the other one has been discussed indirectly under teaching strategies (cf. 2.5.3.5).

* **Skills of organizing communication in the classroom**

Communication in the classroom should promote the teaching learning process. Teachers in some instances may be required to direct the conversation taking place in the classroom between the teacher and pupils or that amongst the pupils. The process enhances the teaching learning activity in the classroom situation.

* **Skills of organizing and managing the learning environment**

The teacher needs to make the classroom a place conducive to learning by bringing to the classroom teaching aids, instilling the culture of learning in the pupils and creating the climate or atmosphere which promotes the teaching learning process. Where possible the classroom should be like a workshop, i.e. the teacher should organize and manage the classroom in such a way that pupils will be occupied with the subject matter he is teaching.

2.6 THE NEED TO APPRAISE SECONDARY SCHOOL TEACHERS IN THE CLASSROOM SITUATION

Fidler (1991:9) remarks that appraisal provides an opportunity to examine the teacher's job description to see how faithfully it reflects the reality of the situation and to amend it where necessary. Secondary school teachers need appraisal in one way or another in the classroom situation to help them to know the areas where they need to improve. Appraisal may boost the

teaching learning activity. Strategies and programmes need to be found to appraise the teachers.

Bollington, Hopkins and West (1990:1) point out that appraisal motivates teachers by indicating they are considered as individuals and that it also highlights problems and difficulties and help solve them. This implies that appraisal recognizes the principle of individuality. If this is applied in good faith the standard of teaching in the secondary school could be improved. Appraisal brings a greater degree of accountability to the teachers in their teaching.

Bollington *et al.* (199);60) also see appraisal as the culmination of a series of activities designed to improve the professional development of teachers and to identify more precisely their needs while in the teaching profession. This implies that appraisal is seen as the right activity designed to improve the professional development of teachers and to identify more precisely their needs while in the teaching profession. Appraisal is aimed at making teachers more effective in the classroom.

The above explanation emphazises the importance of appraisal to secondary school teachers. In the Northern Province teachers can benefit a lot from appraisal. The benefit may occur during the process itself when they are shown or realize their weak points and how to improve them. This may also serve as a good strategy for helping academically and professionally underqualified teachers.

2.7 SUMMARY

An attempt was made in this chapter to identify the didactic-professional inservice training needs of secondary school teachers. Secondary school teachers need to:

- improve their academic competence;
- update their knowledge and skills to be able to cope with professional technological changes;
- improve their professional competence; and

- be appraised in the classroom situation.

In the next chapter of this study, attention will be paid to programmes and strategies that are being used in the Northern Province to satisfy the didactic-professional needs of secondary school teachers. Departmental and educational institutions' inservice training programmes of secondary school teachers found in the Northern Province will be discussed.

CHAPTER 3

3. THE PRESENT SITUATION IN THE NORTHERN PROVINCE REGARDING THE PROVISION OF INSERVICE EDUCATION AND TRAINING OF TEACHERS

3.1 INTRODUCTION

This chapter starts by giving the aims of inservice education and training. This is followed by a short description of the provision of inservice education and training by different institutions and agencies in the Northern Province.

3.2 THE AIM OF INSERVICE EDUCATION AND TRAINING

Various definitions of inservice education and training exist. All these definitions point to inservice education and training as the education and training provided to the teachers who are already in the teaching profession. Seakamela (1993:5), for example, sees inservice education and training as referring to all courses and training activities in which the teacher who is already in the teaching profession may participate to improve for his/her career prospects. Oldroyd and Hall (1991:2) also see inservice education and training as planned training activities practised both within and outside school primarily to develop the professional staff in schools. This education and training is provided to both professionally qualified and professionally unqualified teachers.

Hoy and Miskel (1991:141) are of the opinion that the work teachers do is predominately intellectual, cannot be standardized or routinized and calls for prolonged preparation through education and training. Inservice education and training aims at preparing teachers to make positive decisions that promote learning by pupils.

According to Bondesio and De Witt (1991:275), the preservice training of teachers nowadays is no longer adequate. This may be partially due to the knowledge explosion brought about by research, technological changes and the nature of preservice training explained in the previous chapter. Inservice education and training aims at making the teachers effective in the classroom by supplementing knowledge acquired during preservice training.

Oldroyd and Hall (1991:25) are also of the opinion that inservice education and training serves as a major vehicle for delivering educational reform. This implies that educational reform is facilitated by inservice education and training of teachers. Without this education and training teachers could fail to use new skills brought about by educational reforms. Programmes and strategies that are used during inservice education and training enable teachers in secondary schools to learn new skills required by new subject matter brought about by curricula changes and also to improve their professional and academic competence. In other words, inservice educational and training aims at, amongst others, bringing the secondary school teachers up to date with what is in the curricula.

Teachers may use new teaching skills they acquire during inservice education and training programmes in the subjects they are teaching. This is supported by Gurney (1990:94) who states that "many teachers go on inservice courses and return to the classroom to implement their new skills and insight if they are appropriate to the reality of their syllabus, their children and their school, without knowing how they developed or improved". This implies that inservice education and training improves the teachers' academic and professional competence.

The aim of inservice education and training is to increase competence and performance of teachers in the classroom situation. No teacher can teach effectively in the classroom without a high level of competence and performance. Oldroyd and Hall (1991:101) regard the teacher's performance as what the teacher does in the classroom rather than what he or she can do.

The aim of inservice education and training in the Northern Province should not be different from the above. This study will look at the following opportunities at present available for inservice education and training in the Northern Province:

- Inservice education and training opportunities in educational institutions, such as schools, universities, colleges and inservice training centres.
- Departmental inservice education and training programmes.
- Non governmental organizations' inservice education and training programmes.

3.3 INSERVICE EDUCATION AND TRAINING OPPORTUNITIES IN EDUCATIONAL INSTITUTIONS

Inservice education and training opportunities in educational institutions in the Northern Province are grouped into:

- School based activities that aim at developing teaching experience and performance.
- University programmes for improving teachers' academic competence.
- University programmes for improving teachers' professional competence.
- College programmes that aim at improving professional competence.
- Short courses and seminars conducted by the inservice training centres.

3.3.1 School based activities that aim at developing teaching experience and performance

These are activities within schools practised by personnel of that particular school. These personnel can be the principal, deputy principals, departmental heads and/or the teachers themselves. The following inservice education and training activities will be dealt with under the subheading with the exclusion of class visits which will be dealt with under departmental inservice education and training programmes:

- Appraisal of teachers

- Reflective practice
- Observation
- Monitoring of written work
- Monitoring of examination content
- Staff meetings.

3.3.1.1 Appraisal of teachers

Valentine (1992:1) maintains that the ultimate goal in education should be to provide the best quality educational experience for the pupils. In the Northern Province appraisal of teachers is used in schools by principals, deputy principals, departmental heads and teachers to strive for this goal in their teaching.

Oldroyd and Hall (1991:73) see appraisal as constituting one of the most personal means of need identification since it focuses on individual teachers and their experience in the workplace. Bell (1991:5) is of the opinion that the individual teacher wants a process that caters for his personal self improvement and which acknowledges the difficulties and complexities of the job.

According to Piek (1989:66), during appraisal attention should be paid to the teacher's control over the teaching situation, the motivation of the pupils in the course of the teaching learning activities, the use of teaching methods applied and the personal appearance of the teacher. All these are the most important aspects in the teaching profession that need to be improved for the teacher to teach effectively in the classroom. Oldroyd and Hall (1991:73) also see appraisal as taking place against a background of what both the individual teacher and his or her appraiser know about the school needs. This implies that the teacher and his or her appraiser know what they want to achieve by appraisal.

In the Northern Province appraisal of teachers differs from school to school. Some schools are highly involved in the process while others are less

involved, depending on the principals' attitude regarding the value of the appraisal. During this process in the Northern Province a teacher may request another teacher, with the approval of the principal to observe his or her lesson. After a lesson a discussion may be held with the teacher to show him or her his or her weakness and areas where he or she excels.

3.3.1.2 Reflective practice

Osterman and Kottkamp (1993:19) see reflective practice as a means by which practitioners can develop a greater level of self awareness about the nature and impact of their performance and awareness that create opportunities for professional growth and development. Reflective practice may lead to the improvement of the act of teaching in the classroom that may also lead to greater involvement in the act of learning by pupils. In the Northern Province a teacher experiencing disciplinary problems in class may ask for advice or assistance from others in order to eradicate misbehaviour during lessons.

To be engaged in reflective practice in school is not easy. Osterman and Kottkamp (1993:45) maintain that to engage in the reflective process, individuals need to believe that the discussion of problems will not be interpreted as incompetence or weakness. The individual teacher needs to feel safe, secure and be able to take risks. This implies that the principal, deputy principals and departmental heads should not regard teachers who seek help from other teachers to eradicate problems in their classroom as being incompetent.

Osterman and Kottkamp (1993:45) also maintain that for reflective practice to flourish in a particular school, the participants must be confident that the information they disclose will not be used against them. Those with problems in the classroom may not speak freely unless their deputy principals, departmental heads, principals and their colleagues demonstrate that speaking freely is acceptable and will not lead to unpleasant consequences. As a result of the fact mentioned above, reflective practice particularly by the teachers may not be possible in the Northern Province for fear of, amongst

others, being reprimanded by the principals, deputy principals and the departmental heads in their respective schools.

3.3.1.4 Observation

Mutsila (1996), who is an inspector of schools, expressed that Northern Province teachers are also encouraged to observe lessons of their colleagues during their free periods. According to Wajnryb (1992:1), being in the classroom as an observer opens up a range of experience to the observing teacher of what happens in the classroom situation. Wajnryb (1992:7) also maintains that when teachers teach, they are not able to observe processes of learning and interaction as they occur through the lessons from a range of different perspectives outside that of the actual lessons plan of the teacher. Observation in Northern Province schools may not happen. This may be hampered by teachers who feel insecure when others are observing their lesson.

3.3.1.5 Monitoring of written work

Written work of the pupils is monitored in the Northern Province to determine the objectivity of teachers in their marking as well as the quantity and quality of written work. This is in line with Piek's (1989:66) view that monitoring written work should determine whether the marking programme of the teacher is organized effectively and whether written work is distributed in such a way that the teacher is not overloaded with marking work. Again here the success of monitoring of written work also depends on the organization time frames of the principal, deputy principals and departmental heads as well as the management of time by the individual teachers.

3.3.1.6 Control of examination content

According to a communication by Mutsila (1996), examination content of different subjects is controlled by the principals, deputy principals and departmental heads in the Northern Province. This control aims, for example, at helping the teachers to differentiate between the individual pupils' abilities in their question papers. The way this is done is in line with Piek's (1989:67) view that approximately half of the question paper should be aimed at the

average child, while there should be some questions which can be answered by the less gifted child and also some which are aimed mainly at the more gifted child. The control of examination content can also serve the aim of assisting the individual teachers to improve their competence to set an exam paper of balanced quality as well as to assist teachers in evaluating the quality and organization of their own teaching.

3.3.1.7 Staff meetings

Staff meetings are held at various times in different schools. According to Mutsila (1996), meetings of this kind in the Northern Province are divided into general staff meetings and emergency staff meetings.

General staff meetings, according to Mutsila (1996), are meetings held monthly or quarterly to plan and to examine, amongst others, the progress of the teaching learning process in a particular school. Mutsila (1996 is of the opinion that the meetings aim at, amongst others, finding solutions to problems teachers are faced with in the classroom through deliberation that enables teachers to improve their teaching activities.

Emergency staff meetings, according to Mutsila (1996), are held when there are problems in the teaching activities in a particular school. This implies that emergency staff meetings aim at addressing problems in the teaching learning process.

3.3.2 University programmes for improving teachers' academic competence

Easen (1989:5) maintains that "being involved in the act of teaching means having to cope daily with the masses of information with which any teacher is faced". The teacher cannot cope successfully with these masses of information if ways are not found to improve his competence It was mentioned in the previous chapter that teachers need to demonstrate competence in the sense of academic ability.

Mashau (1997), an officer in the regional offices of the Department of Education in the Northern Province, in a circular distributed to schools,

announced that in the Northern Province teachers are granted one year study leave with pay to improve their academic competence at the university of their choice in South Africa. They are also encouraged to improve their academic competence during their spare time at these institutions. The improvement of academic competence, amongst others, enables the secondary school teachers to cope effectively with the subject matter in the classroom when they come back form these universities if what they were doing is relevant to what they are teaching.

Baird (1992:35) maintains that "good teaching results in good learning". The teacher cannot teach effectively if he is not academically well equipped as well as being thoroughly competent in his or her subject. University programmes aim at, amongst others, equipping the secondary school teachers academically.

Admission requirement in these institutions is matric exemption or conditional exemption plus a professional certificate or a professional diploma. Teachers may enrol for diplomas that enrich them with, amongst others, the subject matter they are teaching. Examples of these diplomas are the diploma for biology teaching and the diploma for mathematics teaching at RAU, PU for CHE and Wits University.

3.3.3 University programmes for improving teachers' professional competence

Smit (1998) holds that university programmes that enable secondary school teachers to improve their professional competence are available outside the Northern Province. The training they receive in these institutions aim at, for example, the teachers' skills of organizing and teaching the learning material. Knowledge of the child is also inculcated to the teachers. It is hoped that when these teachers leave these institutions they will know, amongst others, that each child is unique.

Teachers in the Northern Province may, for example, enrol for a certificate in Outcome Based Education or a further diploma in Education specializing in learners with special educational needs through the University of

Stellenbosch in co-operation with Success College. According to Smit (1998), admission requirement is matric plus a teaching profession diploma or certificate.

3.3.4 College programmes that aim at improving professional competence

There are no colleges in the Northern Province that are concerned with the improvement of secondary school teachers' professional competence. Colleges that are concerned with the improvement of secondary school teachers' professional competence are found outside the boundaries of this province. They are, for example, Lyceum and Success Colleges. According to teachers who enrolled in these institutions, Lyceum improves the secondary school teachers' professional competence in collaboration with Rand Afrikaans University, and Success with Pretoria and Stellenbosch Universities.

According to the Lyceum circular to schools in the Northern Province (1998), admission requirement is standard 10 with a primary teacher's certificate or a junior secondary teacher's certificate. Teachers enrol with this institution for a three year teacher's diploma through distance education. To be admitted to Success College, teachers need to be in possession of either primary teacher's diploma, secondary teacher's diploma, HED, UED or an integrated degree (Success College, 1998:8).

3.3.5 Short courses and seminars conducted at the inservice training centres

According to a communication by Netshiombvani (1996), a subject advisor in the Northern Province, courses are conducted by lecturers of inservice training centres in the Northern Province. Circulars from these centres are sent to schools notifying teachers about these courses. Netshiombvani (1996) also states that to be admitted to these courses in these institutions one needs to be teaching the subject in which courses are being conducted. The courses aim at, amongst others, helping teachers to teach effectively and also to make their lessons attractive to the pupils. Examples of these courses are English courses, Afrikaans courses and Maths courses. Teachers are

briefed about new developments in their subjects. The briefing of teachers about new developments is done in the hope that teachers will implement at their respective schools the competence they acquired in order to motivate pupils into the act of learning. It is also hoped that the competence the teachers acquired from these courses will attract the pupils to imitate the teachers' behaviour. This imitation of behaviour of teachers is in line with Cullingford's (1990:189) statement that children tend to model themselves on the characteristics of their favourite teachers.

Seminars are sometimes convened at inservice training centres. Experts from other educational institutions are sometimes invited to address the teachers who are teaching a particular subject. Examples of seminars are English seminars and Geography seminars at the inservice training centres. The aim of these seminars is to inform teachers about new developments in their subjects and also to solve problems teachers are faced with in the classrooms. The seminars also aim at enriching the teachers with the subject matter and skills needed to teach the learning material to the pupils. According to Louden (1991:105), "in classroom work the teacher's imperative is to act, to respond to what is happening at the moment and then to move on". The teacher cannot respond positively to what is happening if he or she is not well grounded in the subject matter and skills for teaching. His or her command of the subject matter can be improved by these seminars.

3.4 DEPARTMENTAL INSERVICE EDUCATION AND TRAINING PROGRAMMES

These are inservice education and training programmes carried out or made possible by inspectors of schools and subject advisors of the Department of Education. Teachers in secondary schools may also identify their developmental needs through these programmes. Departmental inservice education and training programmes are carried out with the sole purpose of improving the competence and performance of secondary school teachers. According to a communication by Razwiedani (1997), a circuit manager in region 3 in the Northern Province, the following are examples of departmental

programmes used in the inservice education and training of teachers in the Northern Province.

- Class visits
- Subject committee meetings
- Regional or decentralised courses.

3.4.1 Class visits

This may be grouped into:

- Class visits by circuit managers
- Panel inspection
- Assistance to secondary school teachers by subject advisors.

3.4.1.1 Class visits by circuit managers

Razwiedani (1997) sees circuit managers as inspectors of schools who control the affairs of circuits. Razwiedani (1997) also states that each circuit has its own circuit manager who is located at the circuit office.

According to Razwiedani (1997), circuit managers use class visits to identify teachers' didactic professional needs in their circuits. During these visits the circuit managers pay attention to how the teachers motivate the pupils, the teachers' utilisation of teaching aids, the teachers' command of the subject matter, the written work and the appearance of the teachers.

Wilkins (1991:39) regards inspectors as persons who may identify the problem areas that need to be developed by the teachers in their teaching. This is because they were appointed to this rank as a result of their abilities in teaching.

Razwiedani (1997) sees the visits by circuit managers to the classroom in the Northern Province as corresponding with class visits by the principal, deputy principal and departmental heads of a particular school. Circuit managers sit in the classroom and observe what is taking place between the teacher and

pupils. After the lessons the teacher's weak points may by brought to the fore by the circuit managers and suggestions on how to improve these weak points are made. Razwiedani (1997) states that teachers may also be encouraged to maintain the standard in the area where they were found to excel.

3.4.1.2 Panel inspection

Panel inspection is conducted in the same way class visits by circuit managers are conducted. According to Razwiedani (1997), the only difference is that in panel inspection a group of inspectors from different inspection areas visit a particular school to identify the shortcomings in the teaching activities through, amongst others, monitoring pupils' written work. Bridges (1992:126) sees the visit as often followed by a conference, a written report or both. The aim of panel inspection is to help each and every member of the staff to identify his or her weak points that need to be improved through the written report and the discussion the teachers may hold with inspectors.

3.4.1.3 Assistance to secondary school teachers by subject advisors

Subject advisors are also called subject inspectors. According to Dean (1992:6), the advisory teacher posts are filled by good teachers whose strength is that they bring recent and first hand school experience which makes them highly credible to teachers. Subject advisors aim at, amongst others, identifying the problem areas in the classroom of each and every teacher that need to be addressed and also at suggesting programmes in which teachers can be involved to improve their teaching.

According to a communication by Netshiombvani (1996), the visit to the classroom of subject advisors corresponds to the way in which inspectors of schools operate. The only difference is that of observing teachers in action in the subjects in which they have a command of learning material.

3.4.2 Subject committee meetings

According to Netshiombvani (1996), subject committee meetings of different subjects are held in each and every circuit and inspection area.

Netshiombvani (1996) sees these meetings as aiming at enabling teachers to discuss the subject matter and problems they are faced with in the classroom. The meetings may help a great deal when they go back to the classroom if teachers implement strategies in their lessons that were regarded as being useful during their discussion in these meetings.

3.4.3 Regional or decentralised courses

Courses for secondary school teachers are also organized by the Department at regional level. These courses are known as regional or decentralised courses. Unlike those offered by inservice training centres that have fixed venues, venues for the regional or decentralised courses are not fixed. They are decided by the Department. Circulars from regional officers are sent to secondary schools informing teachers about the dates and venues for these courses. Subject advisors and other experts is different subjects conduct these courses. Netshiombvani (1996) sees the courses as aiming at, amongst others, equipping teachers with the teaching strategies and subject matter of the subjects teachers are teaching in their respective schools. Examples of these courses are courses conducted by examiners of grade 12 subjects in different regions of the Northern Province.

3.5 NON GOVERNMENTAL ORGANIZATIONS' INSERVICE EDUCATION AND TRAINING

In the Northern Province no non governmental organization (NGO) is involved in inservice training of secondary school teachers. According to Motsoaledi (1996), NGO's in the Northern Province are working in partnership with the province to train only the lower management (clerks) in the education ministry to be computer literate.

3.6 SUMMARY

This chapter identified the aim of inservice training and how inservice training in the Northern Province is provided. Opportunities available at present for inservice training in Northern Province were brought to the fore. In the next chapter of this study attention will be given to the empirical study.

CHAPTER 4

4. EMPIRICAL STUDY

4.1 INTRODUCTION

The chapter starts by giving the aims of an empirical study and the design of the research. The last part concentrates on the interpretation of the data collected by means of a questionnaire.

4.2 THE AIMS OF THE EMPIRICAL STUDY

According to Borg and Gall (1989:424), 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 wants to illicit information from the respondents in order to determine their perception regarding the provision of inservice training of secondary school teachers in the Northern Province. The specific objectives of the empirical study are:

- to collect data on the current practice of inservice training of secondary school teachers;
- to collect data on the effectiveness of inservice training of secondary school teachers in Venda in the Northern Province; and
- to interpret the collected data on the inservice training of secondary school teachers in Venda in the Northern Province.

4.3 DESIGN OF RESEARCH

4.3.1 Method

The method is a field survey by means of a questionnaire, consisting of Likert-type items.

4.3.1.1 Advantages of a questionnaire

Sidhu (in Moloko, 1996:89) 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 can not otherwise be reached.
- It has great potential for collecting data required for research purposes if properly used.
- Once it has been constructed skilfully, the investigator may ask anybody to administer it on his behalf.
- It places less pressure on the subject for immediate response; the subject can answer it at leisure.
- 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 responses of the total sample is distributed on each questionnaire item.

4.3.1.2 Criticisms of a questionnaire

Wiersma (in Seakamela, 1993:84) levels the following criticisms against the use of questionnaires:

- High non-response rate. But in this case the questionnaires were delivered to respondents and collected from them to overcome this problem.

- Unreliable response from respondents.

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. Despite the above stated criticisms, Sidhu (in Moloko, 1996:90) still sees the questionnaire as an appropriate instrument for empirical survey.

4.3.1.3 Questionnaire format

The following rules concerning the questionnaire format guided the design of the questionnaire (Borg and Gall, 1989:431-432):

- The questionnaire should be attractive to the respondents.
- Organize and lay out questions in such a way that the questionnaire can be as easy to complete as possible.
- Number the questionnaire items and pages.
- Give the name and address of a person to whom the form should be returned at the beginning and again at the end of the questionnaire even if a self addressed envelope is included.
- Include clear instructions, printed in bold type.
- Use examples before any items that might be confusing or difficult to understand.
- Organize the questionnaire in a logical sequence.
- When moving to a new topic, include a transitional sentence to help respondents change their train of thought.
- Begin with an interesting and non-threatening item.
- Do not put important items near the end of the questionnaire.
- Put threatening or difficult items near the end of the questionnaire.
- Avoid using the words "questionnaire" or "checklist" on your form.

- Include enough information in the questionnaire so that items can be meaningful to the respondent.

4.3.2 Composition of the questionnaire

The construction of the questionnaire was influenced by Borg and Gall (1989:430) who maintain that each item on the researcher's questionnaire must be developed to measure a specific aspect of one of his or her objectives or hypotheses. Borg and Gall's (1989:427) view was taken into consideration i.e. that the researcher should make an effort to frame his or her questions in a language that the respondents will understand.

Questions were designed in closed form for this study (cf. Appendix A). Closed form questions enable qualification and analysis of the results to be carried out efficiently (Borg & Gall, 1989:248).

The following rules of Borg and Gall (1989:430) for constructing the questionnaire were taken into consideration:

- Clarity is essential, ambiguity should be avoided.
- Short items are easier to understand.
- Negative items should be avoided as they are usually misread by respondents.
- Avoid a "double barrelled" item which requires the subject to respond to two ideas with a single answer.
- Do not use technical terms, jargon or "big words" that some respondents may not understand.
- Start by asking the general questions first when general and related specific questions are to be asked.

Items on biography and demography, provision of inservice training and inservice training programmes in the Northern Province were included in the questionnaire in order to gather the information relevant to this study. A Likert-type scale was used.

4.3.3 Population and sample

The research is concerned with the inservice training of secondary school teachers in former Venda in the Northern Province. The population is composed of teachers, principals, deputy principals, departmental heads and subject advisors. A random sample of 3 teachers per school (n=244), a random sample of principals, deputy principals and heads of department (n=105) and all subject advisors (n=11) was taken. Because the function of principals, deputy principals, and departmental heads is essentially that of managers, these respondents were clustered as managers.

4.4 REPRESENTATION OF BIOGRAPHICAL AND DEMOGRAPHICAL DATA OF THE RESPONDENTS

Part one of the questionnaire was designed to gather the biographical and demographical characteristics of the respondents. Frequencies and percentages were used in interpreting the biographical and demographical data of the respondents. This presentation follows the format of the questionnaire.

4.4.1 Sex of the respondents

Table 4.1: Sex

Gender	Frequency	Percentage
Male	254	70,8
Female	105	29,2
Total	**359**	**100,0**

According to Table 4.1, 254 (70,8%) of the respondents were male and 105 (29,2%) female. One questionnaire was not returned by the respondent.

4.4.2 Ages of the respondents

Table 4.2: Ages

Ages	Frequency	Percentage
20-29	41	11,4
30-39	163	45,4
40-49	140	39,0
50+	15	4,2
Total	359	100,0

Table 4.2 shows that the majority of respondents were in the 30-39 age group. This means that 204 (56,8%) of the respondents were under the age of 40, while 344 (94%) were younger than 50 years. Fourty one or 11,4% belonged to the younger generation of the respondents, i.e. those within 20-29 age group. This shows that 88,6% of the respondents were above the 20-29 age group.

4.4.3 Academic qualifications of the respondents

Table 4.3: Highest academic qualifications

Qualification	Frequency	Percentage
Std 10	115	32,0
B. Degree	127	35,4
B.Ed./Honours	108	30,1
M. Degree	9	2,5
Total	359	100,0

Table 4.3 shows the highest academic qualifications of the respondents. 115 (32%) of the respondents have std. 10 as their highest academic qualification. 127 (35,4%) have a junior degree, 108 (30,1%) have an honours/B.Ed. degree and 9 (2,5%) reported that they possess a master's degree. This shows that academically 68% of the respondents are well qualified.

4.4.4 Professional qualification of the respondents

Table 4.4: Professional qualification

Professional qualification	Frequency	Percentage
PTC	12	3,4
JSTC	91	25,4
SPTD	6	1,7
STD	116	32,4
UED/HED	107	29,9
Integrated degree	26	7,3
Total	358	100,0

Table 4.4 shows the professional qualifications of the respondents. 12 (3,4%) of the respondents have PTC as their professional qualification, 91 (25,4) have JSTC, 6 (1,7%) have SPTD, 116 (32,4%) have STD, 107 (29,9) have UED or HED and 26 (7,3%) have an integrated degree. One respondent didn't respond. This shows that 71,2% of the respondents are well qualified.

4.4.5 Positions of the respondents

Table 4.5: Positions of the respondents

Position	Frequency	Percentage
Principal	48	13,4
Deputy principal	11	3,1
Departmental head	44	12,3
Teacher	244	68,2
Subject advisor	11	3,1
Total	358	100,0

Table 4.5 shows the positions held by the respondents. 48 (13,4%) of the respondents are principals, 11 (3,1%) are deputy principals, 44 (12,4%) are departmental heads, 244 (68,2%) are teachers and 11 (3,1%) are subject

advisors. One respondent did not respond. This indicates a desired representation of teaching personnel on the different levels.

4.4.6 Experience in the post

Table 4.6: Experience of respondents in their positions

Years	Frequency	Percentage
0-5	73	20,3
6-10	138	38,4
11-15	77	21,4
16-20	43	12,4
21+	28	7,8
Total	359	100,0

Table 4.6 shows that 73 respondents (20,3%) have 0-5 years of experience in their positions, 138 respondents, i.e. (38,4%) have 6-10 years, 43 respondents (12,4%) have 16-20 years and 28 (7,8%), have 21 and more years of experience. This suggests that the majority of teachers still needs assistance in terms of inservice education and training because of their lack of experience.

Table 4.7: Highest academic training the respondents received for the subjects they were teaching

Academic training	Frequency	Percentage
Senior degree	44	12,3
Course three of a degree	136	38,1
Course two of a degree	31	8,7
Course one of a degree	16	4,5
College training	85	23,8
Std. 10	38	10,6
None	7	2,0
Total	257	100,0

Table 4.7 shows the highest academic training of the respondents for the subjects they are teaching. 44 respondents (12,3%) have senior degrees, 136 respondents (38,1%) have course three of a degree, 31 respondents (8,7%) have course two of a degree, 16 respondents had course one of a degree, 85 respondents (23,8%) have college training, 38 respondents (10,6%) have Std. 10 and 7 respondents (2,0%) have no training for the subject they are teaching. Two respondents did not respond. This indicates that the present teaching personnel is mostly appropriately qualified.

4.4.8 Summary of biographical and demographical data of the respondents

From the information above it can be stated that secondary schools in the Northern Province still have the problem of gender equality. The majority of teachers are still male. It can also be stated that professionally and academically the majority of teachers in the Northern Province are well qualified. The vast majority of teachers are also older than the 20-29 age group. The position of respondents indicates a desired representation of teaching personnel on different levels.

4.5 A COMPARISON OF THE IDENTIFIED NEEDS OF TEACHERS

4.5.1 Cohen's criterion for effect sizes of differences

In this study the practical significant differences for managers (i.e. principals, deputy principal and departmental heads) and teachers, and managers and subject advisors were determined. This is in line with Lowson's (1996:132) view that estimation of effect size is relevant both prior to the finalizing of an experimental design and again when the results of the experiment are being evaluated.

The d-value was computed using the following formula of Cohen (in Moloko, 1996:132):

$$d = \frac{x_1 - x_2}{sd_{max}}$$

where x_1 = mean of one group

x_2 = mean of the other group

sd_{max} = maximum of the two standard deviations of the group

The following cut off points by Cohen (in Lowson, 1996:132) were used to indicate the effect of differences between the average of the groups.

$d < 0,2$: insignificant differences

$0,2 \leq d < 0,5$: difference with small effect

$0,5 \leq d < 0,8$: difference with medium effect

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

4.5.2 Comparison of responses regarding organizational skills

The following comparison of responses for managers, teachers and subject advisors regarding organizational skills identified in Chapter 2 is made in this study (cf. 2.5.7).

Table 4.8: Practical differences in responses for organizational skills

(i) MANAGERS AND TEACHERS

	Managers		Teachers		Effect size
Item	**Mean**	**SD**	**Mean**	**SD**	**d-value**
16	1,86	0,81	1,94	0,77	0,1
17	1,89	0,88	1,93	0,74	≈0,0
18	1,82	0,81	1,85	0,83	0,04
19	1,76	0,77	1,89	0,77	0,2
20	2,03	0,94	2,00	0,86	≈0,0

(ii) MANAGERS AND SUBJECT ADVISORS

	Managers		Subject advisors		Effect size
Item	Mean	SD	Mean	SD	d-value
16	1,86	0,81	2,09	0,94	0,2
17	1,89	0,88	2,09	1,14	0,2
18	1,82	0,81	1,91	0,83	0,1
19	1,76	0,77	1,73	0,79	≈0,0
20	2,03	0,94	1,73	0,79	0,3

(iii) TEACHERS AND SUBJECT ADVISORS

	Teachers		Subject advisors		Effect size
Item	Mean	SD	Mean	SD	d-value
16	1,94	0,77	2,09	0,94	0,2
17	1,93	0,74	2,09	1,14	0,1
18	1,85	0,83	1,91	0,83	0,1
19	1,89	0,77	1,73	0,79	0,2
20	2,00	0,86	1,73	0,79	0,3

(i) Managers and teachers

Table 4.8 shows that there is a difference with small effect between the responses of managers and teachers to the following items:

- Item 19: Skills of organizing learning strategies (d=0,2).

In the other cases the differences are insignificant, showing that managers and teachers are actually in agreement on the respective items.

(ii) Managers and subject advisors

According to Table 4.8 there is a difference with small effect between the responses of managers and subject advisors to the following items:

- Item 16: Skills of organizing the pupils in the classroom (d=0,2).

- Item 17: Skills of organizing communication in the classroom (d=0,2).

- Item 20: Skills of organizing learning material (d=0,3).

In other cases the differences are insignificant, showing that managers and subject advisors are actually in agreement on the respective items.

(iii) Teachers and subject advisors

Table 4.8 shows that there are differences with small effect between the responses of teachers and subject advisors to the following items:

- Item 16: Skills of organizing the pupils in the classroom (d=0,2).

- Item 19: Skills of organizing learning strategies (d=0,2).

- Item 20: Skills of organizing learning material (d=0,3).

In other cases the differences are insignificant, showing that teachers and subject advisors are actually in agreement on the respective items.

(iv) Summary of the main findings regarding organizational skills

The three categories of respondents agree that there is a need for assistance regarding organizational skills.

4.5.3 Comparison of respondents regarding enrichment

The following comparison of responses for managers, teachers and subject advisors regarding enrichment of teaching skills (cf. 2.5.2) and teaching strategies (cf. 2.5.3) identified in Chapter 2 is made in this study:

Table 4.9: Practical differences in responses on enrichment

(i) MANAGERS AND TEACHERS

	Managers		Teachers		Effect size
Item	Mean	SD	Mean	SD	d-value
21	2,04	0,88	2,04	0,84	0,0
22	1,95	0,84	2,02	0,93	0,1
23	2,03	1,03	2,06	0,99	≈0,0
24	1,77	0,76	1,77	0,80	0,0
25	1,85	0,82	1,96	0,97	0,1
26	2,09	1,00	2,11	1,05	≈0,0
27	2,04	0,80	2,06	0,84	≈0,0
28	2,01	0,77	1,95	0,89	0,01
29	1,82	0,93	1,80	0,77	≈0,0
30	1,98	0,98	1,98	1,03	0,0
31	1,75	0,83	1,89	0,91	0,2
32	2,15	0,90	2,12	0,94	≈0,0

(ii) MANAGERS AND SUBJECT ADVISORS

	Managers		Subject advisors		Effect size
Item	Mean	SD	Mean	SD	d-value
21	2,04	0,88	1,55	0,69	0,6
22	1,95	0,84	1,82	0,60	0,2
23	2,03	1,03	1,64	0,50	0,4
24	1,77	0,76	1,64	0,67	0,2
25	1,85	0,82	1,55	0,69	0,4
26	2,09	1,00	1,45	1,52	0,4
27	2,04	0,80	1,73	0,65	0,5
28	2,01	0,77	2,09	0,04	0,1
29	1,82	0,93	1,82	0,98	0,0
30	1,98	0,98	2,00	1,63	≈0,0
31	1,75	0,83	1,64	0,67	0,1
32	2,15	0,90	1,73	0,65	0,5

(iii) TEACHERS AND SUBJECT ADVISORS

	Teachers		Subject advisors		Effect size
Item	Mean	SD	Mean	SD	d-value
21	2,04	0,84	1.55	0.69	0,6
22	1,02	0,93	1,82	0,60	0,2
23	2,06	1,99	1,64	0,50	0,4
24	1,77	0,80	1,64	0,67	0,2
25	1,96	0,97	1,55	0,69	0,4
26	2,11	1,05	1,45	0,52	0,7
27	2,06	0,84	1,73	0,65	0,4
28	2,95	0,84	2,09	1,04	0,1
29	1,80	0,77	1,82	0,98	≈0,0
30	1,98	1,03	2,00	0,63	≈0,0
31	1,89	0,91	1,64	0,67	0,3
32	2,12	0,94	1,73	0,65	0,4

(i) Managers and teachers

Table 4.9 shows that there is a difference with small effect between the responses of managers and teachers to the following item:

- Item 31: Teaching through problem solving (d=0,2). In other cases the differences are insignificant, showing that managers and teachers are actually in agreement on the respective items.

(ii) Managers and subject advisors

Table 4.9 shows that there are medium differences between the responses of managers and subject advisors to the following items:

- Item 21: Evaluation skills in the classroom (d=0,6).
- Item 27: Teaching through discussion (d=0,5).
- Item 32: Making decisions in the classroom (d=0,5).

Table 4.9 also shows that there are small differences of responses of managers and subject advisors to the following items:

- Item 22: Individual teaching and individualized teaching (d=0,2).
- Item 23: Differentiated teaching (d=0,4).
- Item 24: Motivation of students (d=0,2).
- Item 25: Team teaching (d=0,4).
- Item 26: Project teaching (d=0,4).

In other cases the differences are insignificant, showing that managers and subject advisors are actually in agreement on the respective items.

(iii) Teachers and subject advisors

According to Table 4.9 there are medium differences in the responses of teachers and subject advisors to the following items:

- Item 21: Evaluation skills in the classroom (d=0,6).
- Item 26: Project teaching (d=0,7).

Table 4.9 also shows that there are small differences in the responses of teachers and subject advisors to the following items:

- Item 22: Individual teaching and individualized teaching (d=0,2).
- Item 23: Differentiated teaching (d=0,4).
- Item 24: Motivation of students (d=0,2).
- Item 25: Team teaching (d=0,4).
- Item 27: Teaching through discussion (d=0,4).
- Item 31: Teaching through problem solving (d=0,3).
- Item 32: Making decisions in the classroom (d=0,4).

In other cases the differences are insignificant, showing that teachers and subject advisors are actually in agreement on the respective items.

(iv) Summary of the main findings regarding enrichment

The three categories of respondents agree that there is a need of enrichment of teaching skills and teaching strategies.

4.5.4 Comparison of responses regarding didactic-professional needs

The following comparison of responses for managers, teachers and subject advisors regarding didactic-professional needs of secondary school teachers identified in Chapter 2 is made in this study (cf. 2.2).

Table 4.10: Differences in responses on didactic-professional needs

(i) MANAGERS AND TEACHERS

	Managers		Teachers		Effect size
Item	Mean	SD	Mean	SD	d-value
33	1,68	0,92	1,52	0,90	0,2
34	1,66	0,88	1,61	0,92	0,1
35	1,54	0,78	1,50	0,83	≈0,0
36	1,78	0,86	1,70	0,81	0,1
37	1,71	0,80	1,69	0,86	≈0,0
38	1,98	0,94	2,00	0,92	≈0,0
39	1,91	0,95	1,89	0,91	≈0,0
40	1,82	0,88	1,81	0,89	≈0,0
41	1,96	0,92	1,97	0,90	≈0,0

(ii) MANAGERS AND SUBJECT ADVISORS

	Managers		Subject advisors		Effect size
Item	Mean	SD	Mean	SD	d-value
33	1,68	0,92	1,82	1,33	0,1
34	1,66	0,88	1,64	0,67	≈0,0
35	1,54	0,78	1,18	0,40	0,5
36	1,78	0,86	1,64	0,67	0,2
37	1,71	0,80	1,73	0,65	≈0,0
38	1.98	0,94	1,64	0,50	0,4
39	1,91	0,95	1,91	0,94	0,0
40	1,82	0,88	2,00	0,45	0,2
41	1,96	0,92	1,55	0,52	0,4

(iii) TEACHERS AND SUBJECT ADVISORS

	Teachers		Subject advisors		Effect size
Item	Mean	SD	Mean	SD	d-value
33	1,52	0,90	1,82	1,33	0,2
34	1,61	0,92	1,64	0,67	≈0,0
35	1,50	0,83	1,18	0,40	0,4
36	1,70	0,81	1,64	0,67	0,1
37	1,69	0,86	1,73	0,65	≈0,0
38	2,00	0,92	1,64	0,50	0,4
39	1,89	0,91	1,91	0,94	≈0,0
40	1,81	0,89	2,00	0,45	0,2
41	1,97	0,90	1,55	0,52	0,5

(i) Managers and teachers

Table 4.10 shows a small difference between the responses of managers and teachers to the following item:

- Item 33: Improvement of academic competence of underqualified teachers (d=0,2).

In other cases the differences are insignificant, showing that managers and teachers are actually in agreement on the respective items.

(ii) Managers and subject advisors

According to Table 4.10, there are medium differences between the responses of managers and subject advisors to the following item:

- Item 35: Updating of teachers' knowledge and skills to enable them to cope with technological changes (d=0,5).

Table 4.10 also shows small differences in responses of managers and subject advisors to the following items:

- Item 36: Teaching skills (d=0,2).
- Item 38: Evaluation skills (d=0,4).
- Item 40: Knowledge of the child (d=0,2).
- Item 41: Organizational skills (d=0,4).

In other cases the differences are insignificant, showing that managers and subject advisors are actually in agreement on the respective items.

(iii) Teachers and subject advisors

Table 4.10 shows medium differences between the responses of teachers and subject advisors to the following item:

- Item 41: Organizational skills (d=0,5).

Table 4.10 also shows a small significant difference between the responses of teachers and subject advisors to the following items:

- Item 33: Improvement of academic competence of underqualified teachers (d=0,2).

- Item 35: Updating the teachers' knowledge and skills to enable them to cope with technological changes (d=0,4).
- Item 38: Evaluation skills (d=0,4).
- Item 40: Knowledge of the child (d=0,2).

In other cases the difference is insignificant, showing that teachers and subject advisors are actually in agreement on the respective items.

(iv) Summary of the main findings regarding the didactic-professional needs of secondary school teachers

The three categories of respondents agree that teachers need the identified didactic-professional needs.

4.5.5 Comparison of responses regarding opportunities for inservice training in the Northern Province

The following comparison of responses for managers, teachers and subject advisors regarding opportunities for inservice education and training identified in Chapter 3 is made in this study (cf. 3.2).

Table 4.11: Differences in responses on opportunities for inservice training in the Northern Province

(i) MANAGERS AND TEACHERS

	Managers		Teachers		Effect size
Item	Mean	SD	Mean	SD	d-value
42	4,25	1,14	4,09	1,26	0,1
43	4,03	1,17	3,94	1,21	0,1
44	4,42	0,94	4,27	1,10	0,1
45	2,83	1,17	2,87	1,09	≈0,0
46	3,45	1,14	3,41	1,24	≈0,0
47	3,45	1,12	3,39	1,22	≈0,0
48	3,78	1,02	3,49	1,29	0,2
49	3,66	1,16	3,45	1,30	0,2

(ii) MANAGERS AND SUBJECT ADVISORS

	Managers		Subject advisors		Effect size
Item	Mean	SD	Mean	SD	d-value
42	4,25	1,14	3,55	1,29	0,5
43	4,03	1,17	3,45	0,98	0,5
44	4,42	0,94	3,91	1,38	0,4
45	2,83	1,17	3,10	1,14	0,2
46	3,45	1,14	3,55	1,21	0,1
47	3,45	1,12	3,10	1,22	0,3
48	3,78	1,02	3,27	1,27	0,4
49	3,66	1,16	3,10	1,04	0,5

(iii) TEACHERS AND SUBJECT ADVISORS

	Teachers		Subject advisors		Effect size
Item	Mean	SD	Mean	SD	d-value
42	4,09	1,20	3,55	1,29	0,4
43	3,94	1,21	3,45	0,93	0,4
44	4,24	1,10	3,91	1,38	0,3
45	2,87	1,09	3,10	1,14	0,2
46	3,41	1,24	3,55	1,21	0,1
47	3,39	1,22	3,10	1,22	0,2
48	3,49	1,29	3,57	1,27	0,2
49	3,45	1,39	3,10	1,04	0,3

(i) Managers and teachers

Table 4.11 shows small differences between the responses of managers and teachers to the following items:

- Item 48: College programmes that aim at improving professional competence (d=0,2).

- Item 49: Short courses and seminars conducted at the inservice training centre (d=0,2).

(ii) Managers and subject advisors

Table 4.11 shows medium differences between the responses of managers and subject advisors to the following items:

- Item 42: Appraisal of teaching activities in the classroom (d=0,5).
- Item 43: Reflective practice of teachers (d=0,5).
- Item 49: Short courses and seminars conducted at the inservice training centre (d=0,5).

Table 4.11 also shows small differences between the responses of managers and subject advisors to the following items:

- Item 44: Teachers observing lessons of their colleagues (d=0,4).
- Item 45: Staff meetings (d=0,2).
- Item 47: University programmes for improving teachers' academic professional competence (d=0,4).
- Item 48: College programmes that aim at improving professional competence (d=0,4).

In other cases the differences are insignificant, showing that managers and subject advisors are actually in agreement on the respective items.

(iii) Teachers and subject advisors

According to Table 4.11 there are small differences between the responses of teachers and subject advisors to the following items:

- Item 42: Appraisal of teaching activities in the classroom (d=0,4).
- Item 43: Reflective practice of teachers (d=0,4).
- Item 44: Teachers observing lessons of their colleagues (d=0,3).
- Item 45: Staff meetings (d=0,2).

- Item 47: University programmes for improving teachers' academic competence (d=0,2).
- Item 48: University programmes for improving teachers' academic professional competence (d=0,2).
- Item 49: Short courses and seminars conducted at the inservice training centre (d=0,3).

In other cases the differences are insignificant, showing that the managers and subject advisors are actually in agreement on the respective items.

(iv) Summary of the main findings regarding opportunities for inservice education training in the Northern Province

The three categories of respondents agree that there is a need for improvement of the present opportunities for inservice education and training in the Northern Province.

4.5.6 Comparison of responses of departmental inservice education and training programmes

The following comparison of responses for managers, teachers and subject advisors regarding departmental inservice education and training programmes identified in Chapter 3 is made in this study (cf. 3.9).

Table 4.12: Departmental inservice training programmes

(i) MANAGERS AND TEACHERS

	Managers		Teachers		Effect size
Item	Mean	SD	Mean	SD	d-value
51	3,83	0,53	3,77	0,64	0,1
52	3,88	0,43	3,84	0,56	0,1
53	3,69	0,70	3,64	0,73	0,1
54	3,24	0,83	3,14	0,87	0,1
56	2,49	0,67	2,28	0,71	0,3
57	1,38	0,90	1,31	0,88	0,4

(ii) MANAGERS AND SUBJECT ADVISORS

	Managers		Subject advisors		Effect size
Item	Mean	SD	Mean	SD	d-value
51	3,83	0,53	3,73	0,90	0,1
52	3,88	0,43	4,00	0,0	0,3
53	3,69	0,70	2,73	1,01	1,0
54	3,24	0,83	2,55	1,04	0,7
56	2,49	0,67	2,60	0,84	0,1
57	1,38	0,90	1,82	1,83	0,2

(iii) TEACHERS AND SUBJECT ADVISORS

	Teachers		Subject advisors		Effect size
Item	Mean	SD	Mean	SD	d-value
51	3,77	0,64	3,73	0,90	≈0,0
52	3,84	0,56	4,00	0,0	0,3
53	3,64	0,73	2,73	1,01	1,0
54	3,14	0,87	2,55	1,04	0,6
56	2,28	0,71	2,60	0,84	0,4
57	1,31	0,88	1,82	1,83	0,3

(i) Managers and teachers

According to Table 4.12 there are small differences between the responses of managers and teachers to the following items:

- Item 56: Type of inservice education and training (d=0,3).
- Item 57: Institution to provide inservice education and training (d=0,4).

In other cases the differences are insignificant, showing that managers and teachers are actually in agreement on the respective items.

(ii) Managers and subject advisors

Table 4.12 shows a large or practically significant difference between the responses of managers and subject advisors to the following item:

- Item 53: Assistance to secondary school teachers by subject advisors (d=1,0).

This shows that managers at school level and subject advisors differ in a practically significant way about the assistance teachers get from subject advisors.

Table 4.12 also shows a medium difference between the responses of managers and subject advisors to the following item:

- Item 54: Subject committee meetings (d=0,7).

According to Table 4.12, there are also small differences between the responses of managers and subject advisors to the following items:

- Item 52: Panel inspection (d=0,3).

- Item 57: Institution to provide inservice education and training (0,2).

In other cases the differences are insignificant, showing that managers and subject advisors are actually in agreement on the respective items.

(iii) Teachers and subject advisors

Table 4.12 shows a large or practically significant difference between the responses of teachers and subject advisors to the following item:

- Item 53: Assistance to secondary school teachers by subject advisors (d=1,0).

This shows that teachers and subject advisors differ in a practically significant way about the assistance teachers get from subject advisors.

Table 4.12 shows a medium difference between the responses of teachers and subject advisors to the following item:

- Item 54: Subject committee meetings (d=0,6).

Table 4.12 also shows small differences between the responses of teachers and subject advisors to the following items:

- Item 52: Panel inspection (d=0,3).
- Item 56: Type of inservice training (d=0,4).
- Item 57: Institution to provide inservice training (d=0,3).

In the other cases the differences are insignificant, showing that teachers and managers are actually in agreement on the respective items.

(iv) Summary of the main findings regarding departmental inservice education and training

The three categories of respondents agree that there is a need for improvement in all but one of the identified departmental inservice education and training programmes. Managers and subject advisors disagree on assistance to secondary school teachers by subject advisors. Teachers and subject advisors also disagree on assistance to secondary school teachers by subject advisors.

4.6 RANKING OF NEEDS

In the tables below items are ranked from the most urgent to the least urgent needs.

4.6.1 Comparison of needs regarding organizational skills

Table 4.13: Organizational skills

Managers			Teachers			Subject advisors		
Item	Mean	SD	Item	Mean	SD	Item	Mean	SD
19	1,76	0,77	18	1,85	0,83	19	1,73	0,79
18	1,82	0,81	19	1,89	0,77	20	1,73	0,79
16	1,86	0,81	17	1,93	0,74	18	1,91	0,83
17	1,89	0,88	16	1,94	0,77	16	2,09	0,94
20	2,03	0,94	20	2,00	0,86	17	2,09	1,14
d-value	0,3		d-value	0,2		d-value	0,3	

(i) Managers

According to Table 4.13, the majority of respondents in the ranks of managers perceived that skills of organizing learning strategies (item 19) are the most urgent needs for secondary school teachers, and skills of organizing learning material (item 20) are the least urgent needs for secondary school teachers. But there is a small difference in the responses of managers between the most urgent needs and the least urgent needs (d=0,3). This implies that all the identified needs are urgent needs.

(ii) Teachers

Table 4.13 shows that the majority of respondents in the ranks of teachers felt that skills of organizing and managing learning environment (item 18) are the most urgent needs for secondary school teachers, and skills of organizing learning material (item 20) are the least urgent needs for secondary school teachers. The same table also shows a small difference in the responses of teachers between the most urgent needs and least urgent needs (d=0,2). This also implies that all the identified needs are urgent needs.

(iii) Subject advisors

In Table 4.13 the majority of respondents in the ranks of subject advisors felt that skills of organizing learning strategies (item 19) are the most urgent

needs for secondary school teachers, and skills of organizing communication in the classroom (item 17) are the least urgent needs for secondary school teachers. The same table also shows a small difference in the responses of teachers between the most urgent needs and least urgent needs (d=0,3). This also implies that all the identified needs are urgent needs.

(iv) Summary of the main findings regarding organizational skills

The three categories of respondents agree that all five identified needs under organizational skills are urgent needs.

Table 4.14: Enrichment

Managers			Teachers			Subject advisors		
Item	Mean	SD	Item	Mean	SD	Item	Mean	SD
31	1,75	0,83	24	1,77	0,80	26	1,45	0,52
24	1,77	0,76	29	1,80	0,77	25	1,55	0,69
29	1,82	0,93	31	1,89	0,91	21	1,55	0,69
25	1,85	0,82	28	1,95	0,84	23	1,64	0,50
22	1,95	0,84	25	1,96	0,97	24	1,64	0,67
30	1,98	0,98	30	1,98	1,03	31	1,64	0,67
28	2,01	0,77	22	2,02	0,93	27	1,73	0,65
23	2,03	1,03	21	2,04	0,84	32	1,73	0,65
21	2,04	0,88	23	2,06	0,99	22	1,82	0,60
27	2,04	0,80	27	2,06	0,84	29	1,82	0,98
26	2,09	1,00	26	2,11	1,05	30	2,00	0,63
32	2,15	0,90	32	2,12	0,94	28	2,09	1,04
d-value	0,5		d-value	0,4		d-value	0,8	

(i) Managers

Table 4.14 shows that the majority of respondents in the ranks of managers perceived that the most urgent need is teaching through problem solving (item 31) and the least urgent need is making decisions in the classroom. The same table shows that there is a medium difference in the responses of

managers between the most urgent need and least urgent need. This implies that all the identified needs are urgent needs.

(ii) Teachers

In Table 4.14 the majority of respondents in the ranks of teachers felt that the most urgent need of secondary school teachers is motivation of students (item 24) and the least urgent need is making decisions in the classroom. But there is a small difference in the responses of teachers between the most urgent need and least urgent need (d=0,4). This implies that all the identified needs are urgent needs.

(iii) Subject advisors

The majority of respondents in the ranks of subject advisors in Table 4.14 felt that the most urgent need of secondary school teachers is project teaching (item 26) and the least urgent need of secondary school teachers is teaching through examples (item 28). The same table also shows a large or practically significant difference in the responses of subject advisors between the most urgent need and least urgent need (d=0,8). The first nine needs, according to subject advisors, are the most urgent needs.

(iv) Summary of the main findings of needs regarding enrichment

Two of the three categories of respondents agree that all the identified needs regarding enrichment are urgent needs. Subject advisors do not agree that all the identified needs are urgent needs. According to the subject advisors, the first nine needs in the table are urgent needs. Because subject advisors are in the minority, it can be said that all the identified needs regarding enrichment are urgent needs.

4.6.3 Didactic-professional needs

Table 4.15: Didactic-professional needs of secondary school teachers

Managers			Teachers			Subject advisors		
Item	Mean	SD	Item	Mean	SD	Item	Mean	SD
35	1,54	0,78	35	1,50	0,83	35	1,18	0,40
34	1,66	0,88	33	1,52	0,90	41	1,55	0,52
33	1,68	0,92	34	1,61	0,92	38	1,64	0,50
37	1,71	0,80	37	1,69	0,86	34	1,64	0,67
36	1,78	0,86	36	1,70	0,81	36	1,64	0,67
40	1,82	0,88	40	1,81	0,89	37	1,73	0,65
39	1,91	0,95	39	1,89	0,91	33	1,82	1,33
41	1,96	0,92	41	1,97	0,90	39	1,91	0,94
38	1,98	0,94	38	2,00	0,92	40	2,00	0,45
d-value	0,5		d-value	0,6		d-value	1,0	

(i) Managers

According to Table 4.15, the majority of respondents in the ranks of managers felt that the most urgent need of secondary school teachers is to update teachers' knowledge and skills to be able to cope with technological changes (item 35), and the least urgent need of secondary school teachers is evaluation skills (item 38). Table 4.15 also shows a medium difference in the responses of managers between the most urgent need and least urgent need (d=0,5). This implies that all the identified needs are urgent needs.

(ii) Teachers

Table 4.15 shows that the majority of respondents in the ranks of teachers perceived that the most urgent need of secondary school teachers is to update teachers' knowledge and skills to be able to cope with technological changes (item 35), and the least urgent need is evaluation skills (item 38). Table 4.15 also shows a medium difference in the responses of teachers between the most urgent need and least urgent need (d=0,6). This implies that all the identified needs are urgent needs.

(iii) Subject advisors

The majority of respondents in the ranks of subject advisors in Table 4.15 felt that the most urgent need of secondary school teachers is to update teachers' knowledge and skills to be able to cope with technological changes (item 35), and the least urgent need is evaluation skills (item 40). Table 4.15 also shows a large or practically significant difference in the responses of subject advisors between the most urgent need and least urgent need (d=1,0). This implies that not all needs are urgent needs. Only the first seven are regarded urgent needs.

(iv) Summary of the main findings of needs regarding didactic-professional needs of secondary school teachers

Two of the three categories of respondents agree that all the identified didactic-professional needs of secondary school teachers are urgent needs. Subject advisors do not agree. According to them (subject advisors), only the first seven needs are urgent needs. Because of subject advisors being in the minority, it can be said that all the identified didactic-professional needs of secondary school teachers are urgent needs.

4.6.4 Opportunities for inservice education and training in the Northern Province

Table 4.16: Opportunities for inservice training in the Northern Province

Managers			Teachers			Subject advisors		
Item	Mean	SD	Item	Mean	SD	Item	Mean	SD
44	4,42	0,94	44	4,27	1,10	44	3,91	1,38
42	4,25	1,14	42	4,09	1,26	42	3,55	1,29
43	4,03	1,17	43	3,94	1,21	46	3,55	1,21
48	3,78	1,02	48	3,49	1.29	43	3,45	0,93
49	3,66	1,16	49	3,45	1,30	48	3,27	1,27
46	3,45	1,14	46	3,41	1,24	47	3,10	1,22
47	3,45	1,12	47	3,39	1,22	45	3,10	1,14
45	2,83	1,17	45	2,87	1,09	49	3,10	1,04
d-value	1,4		d-value	1,3		d-value	0,7	

(i) Managers

Table 4.16 shows that the majority of respondents in the ranks of managers felt that the most urgent need of secondary school teachers is teachers observing lessons of their colleagues (item 44), and the least urgent need is staff meetings (item 45). Table 4.16 also shows that there is a large or practically significant difference in the responses of managers between the most urgent need and the least urgent need (d=1,4). The first five needs identified in Table 4.16, according to managers, are urgent needs.

(ii) Teachers

According to Table 4.16, the majority of respondents in the rank of the teachers felt that the most urgent need of secondary school teachers is observing lessons of their colleagues (item 45) and the least urgent need is staff meetings (item 45). Table 4.16 also shows that there is large difference in the responses of teachers between the most urgent need and the least urgent need (d=1,3). The identified needs in Table 4.16, according to teachers, are urgent needs.

(iii) Subject advisors

The majority of respondents in Table 4.16 in the ranks of subject advisors felt that the most urgent need of secondary school teachers is teachers observing lessons of their colleagues (item 44) and the least urgent need is short courses and seminars conducted at the inservice training centre (item 49). Table 4.16 also shows a medium difference between the responses of subject advisors on the most urgent need and least urgent need (d=0,7). This implies that all the identified needs are urgent needs.

(iv) Summary of the main findings regarding opportunities for inservice education and training in the Northern Province

The three categories of respondents disagree that all the identified needs are urgent needs. Managers identified the first five needs in Table 4.16 as urgent needs. Teachers identified the first six needs in Table 4.16 as urgent needs. Subject advisors identified all eight needs as urgent needs. Because of both managers and subject advisors being in the minority, it can be said that the first six identified needs are urgent needs.

4.6.5 Departmental inservice education and training programmes

Table 4.17: Departmental inservice education and training programmes

Managers			Teachers			Subject advisors		
Item	**Mean**	**SD**	**Item**	**Mean**	**SD**	**Item**	**Mean**	**SD**
52	3,88	0,43	52	3,84	0,56	52	4,00	0,0
51	3,83	0,53	51	3,77	0,64	51	3,73	0,90
53	3,69	0,70	53	3,64	0,73	53	2,73	1,01
54	3,24	0,83	54	3,14	0,87	56	2,60	0,84
56	2,49	0,67	56	2,28	0,71	54	2,55	1,04
57	1,38	0,90	57	1,31	0,88	57	1,82	1,83
d-value	3,6		d-value	3,5		d-value	2,0	

(i) Managers

Table 4.17 shows that the majority of respondents in the ranks of managers feel that the most urgent need for secondary school teachers is panel inspection (item 52) and the least urgent need is an institution to provide inservice training (item 57). Table 4.17 also shows a large or practical insignificant difference between the responses of managers to the most urgent need and least urgent need (d=3,6). This implies that only the first three needs are urgent needs.

(ii) Teachers

The majority of respondents in the ranks of teachers in Table 4.17 feel that the most urgent need for secondary school teachers is panel inspection (item 52) and the least urgent need is a institution to provide inservice training (item 57). Table 4.17 also shows a large or practical significant difference between the responses of teachers to the most urgent need and least urgent need (d=3,5). This implies that only the first three needs are urgent needs.

(iii) Subject advisors

Table 4.17 shows that the majority of respondents in the ranks of subject advisors felt that the most urgent need for secondary school teachers is panel inspection (item 52) and the least urgent need is an institution to provide

inservice training (item 57). Table 4.17 also shows a large or practical significant difference of responses of subject advisors between the most urgent need and least urgent need (d=2,0). This implies that only the first two needs are urgent needs.

(iv) Summary of the main findings regard departmental inservice education ant training

Managers and teachers identified the first three needs regarding departmental inservice education and training in Table 4.17 as urgent needs. Subject advisors identified the first two needs as urgent needs. Because of subject advisors being in the minority, it can be said that the first three needs are urgent needs.

4.7 INTERPRETATION OF DATA ON THE PROVISION OF INSERVICE EDUCATION AND TRAINING

Part two of the questionnaire was designed to gather information on the provision of inservice training. Again here frequencies and percentages have been used in interpreting the data on the provision of inservice training. The presentation follows the format of the questionnaire.

4.7.1 Qualifications

4.7.1.1 Improvement of academic qualifications by the respondents

Table 4.18: Improvement of academic qualifications by the respondents

Q8	Frequency	Percent
Yes	204	57,0
No	139	38,8
Not applicable	15	4,2
Total	**358**	**100**

Table 4.18 shows that 204(57%) of the respondents improved their academic qualifications while they were working. 154 (43%) did not improve their qualifications. One respondent did not respond. This shows that teachers realize the need to improve their own academic competence.

4.7.1.2 Institutions where academic qualifications have been improved

Table 4.19: Names of institutions where academic qualifications have been improved

Q9	Frequency	Percent
University of the North	10	2,9
University of Venda	93	26,6
Other Universities	97	27,8
Technikon outside the Northern Province	4	1,1
Not applicable	145	41,5
Total	**349**	**100**

Table 4.19 shows that 10 (2,9%) of the respondents improved their academic qualifications at the University of the North, 93(26,6%) at the University of Venda, 97(27,8%) at other Universities, and 4 (1.1%) at a Technikon outside the Northern Province. In general, the table shows that only 103 respondents improved their academic qualifications inside the Northern Province. 10 respondents did not respond. This shows that people are showing interest in the University of Venda and other universities outside the Northern Province.

4.7.1.3 Acquisition of a post graduate degree or diploma

Table 4.20: Post graduate degree or diploma

Q10	Frequency	Percent
Yes	113	31,5
No	246	68,5
Total	**359**	**100**

Table 4.20 shows that 113(31,5%) of the respondents earned a post graduate degree or a technikon diploma while they were working; 246 (68,5%) did not. This implies that more needs to be done to encourage teachers to enrol for a post graduate degree.

4.7.1.4 Institutions where a post graduate degree or diploma has been obtained

Table 4.21: Names of institutions where a post graduate degree or diploma has been obtained

Q11	Frequency	Percent
University of the North	13	3,8
University of Venda	48	13,9
Other Universities	51	14,8
Technikon outside the Northern Province	1	0,3
Not applicable	231	66,9
Total	**344**	**100**

Table 4.21 shows that 13 (3,8%) of the respondents received their post graduate degrees form the University of the North, 48 (13,9%) from the University of Venda, 51 (14,8%) from universities outside the Northern Province and one received a post graduate technikon diploma from a technikon outside the Northern Province, while 15 respondents did not respond. In general, the table shows that only 61 (17,7%) of the respondents received their post graduate degrees inside the Northern Province. This implies that teachers prefer the University of Venda and other universities outside the Northern Province.

4.7.1.5 Improvement of respondents' professional qualifications

Table 4.22: Improvement of professional qualifications

Q12	Frequency	Percent
Yes	98	27,4
No	260	72,6
Total	**358**	**100**

In Table 4.22, 98 (27,4%) of the respondents improved their professional qualifications while they were working. 262 (72,6%) of the respondents did

not. One respondent did not respond. This implies that the majority of teachers need to enrich their professional competence.

4.7.1.6 Institutions where professional qualifications were improved

Table 4.23: Names of institutions where professional qualifications were improved

Q13	Frequency	Percent
University inside the Northern Province	33	9,6
University outside the Northern Province	54	15,7
College outside the Northern Province	8	2,3
Not applicable	249	72,4
Total	**344**	**100**

In Table 4.23, 33(9,6%) of the respondents improved their professional qualifications at the universities inside the Northern Province, 54 (15,7%) at universities outside the Northern Province, 8 (2,3%) at colleges outside the Northern Province. 15 did not respond. This shows the preferences of teachers for universities inside the Northern Province and universities outside the Northern Province at the expense of colleges and technikons.

4.7.1.7 Involvement with the improvement of academic qualifications

Table 4.24: Involvement with the improvement of academic qualifications

Q14	*Frequency*	*Percent*
Yes	*148*	*41,3*
No	*210*	*58,7*
Total	***358***	***100***

Table 4.24 shows that 148 (41,3%) of the respondents were involved in the improvement of their academic qualifications when responding and 210 (58,7%) were not. One respondent did not respond. This shows that the majority of respondents were not involved in the improvement of academic

qualifications when they were responding. This implies that the majority of teachers are not interested in the improvement of academic qualifications.

4.7.1.8 Institutions where respondents were enrolled

Table 4.25: Names of institutions where respondents were enrolled

Q15	Frequency	Percent
University of the North	5	1,4
University of Venda	34	9,7
Other Universities	89	25,5
Technikon outside the Northern Province	20	5,7
Not applicable	201	57,6
Total	**349**	**100**

Table 4.25 shows that 5 (1,4%) of the respondents were, when responding, enrolled at the University of the North, 34 (9,7%) at the University of Venda, 89 (25,5%) at other universities outside the Northern Province and 20 (5,7%) at colleges outside the Northern Province. 201 respondents had not enrolled anywhere. 10 respondents did not respond. This shows that the University of Venda and other universities and technikons outside the Northern Province play a roll in improving qualifications.

4.7.1.9 Summary of the main findings regarding qualifications

According to the information derived from the tables above, the majority of respondents, i.e. 204 (57%) improved their academic qualifications while they were working. Institutions that were preferred when improving their academic qualifications were the University of Venda and other universities outside the Northern Province. Only a few respondents, 113 (31,5%), earned post graduate degrees or diplomas. Institutions that were preferred when enrolling for these degrees or diplomas were the University of Venda and other universities outside the Northern Province. Very few improved their professional qualifications while they were working and institutions preferred when improving the professional qualifications were universities inside the

Northern Province and universities outside the Northern Province. At present few respondents, i.e. 148 (41,3%), enrolled at institutions of higher learning. This may be partly due to lack of incentive on the part the government in the form of increment of the salaries of persons who have improved their academic qualifications. Those who are at present involved in the improvement of academic qualifications are either enrolled at the University of Venda, other universities outside the Northern Province and technikons outside the Northern Province.

4.7.2 Organizational skills

4.7.2.1 Skills of organizing the pupils in the classroom

Table 4.26: Skills of organizing the pupils in the classroom

Q16	Frequency	Percent
Definitely	113	31,5
In many areas	170	47,4
In a few areas	68	18,9
Definitely not	6	1,7
I am not sure	2	0,6
Total	**359**	**100**

Table 4,26 shows that the majority of respondents, i.e. 283 (78,9%), felt that secondary school teachers need assistance definitely or in many areas on the skills of organizing the pupils in the classroom.

4.7.2.2 Skills of organizing communication in the classroom

Table 4.27: Skills of organizing communication in the classroom

Q17	Frequency	Percent
Definitely	115	32,0
In many areas	170	47,4
In a few areas	65	18,1
Definitely not	6	1,7
I am not sure	3	1,8
Total	**359**	**100**

Table 4.27 shows that the majority of respondents, i.e. 285 (79,4), felt that secondary school teachers need assistance definitely or in many areas on the skills of organizing communication in the classroom.

4.7.2.3 Skills of organizing and managing the learning environment

Table 4.28: Skills of organizing the pupils in the classroom

Q18	Frequency	Percent
Definitely	132	36,8
In many areas	167	46,5
In a few areas	50	13,9
Definitely not	4	1,1
I am not sure	6	0,7
Total	**359**	**100**

Table 4.28 shows that the vast majority of respondents, i.e. 299 (83,3%), felt that secondary school teachers need assistance definitely or in many areas on the skills of organizing and managing the learning environment.

4.7.2.4 Skills of organizing learning strategies

Table 4.29: Skills of organizing learning strategies

Q19	Frequency	Percent
Definitely	123	34,3
In many areas	179	49,9
In a few areas	48	13,4
Definitely not	6	1,7
I am not sure	3	0,8
Total	**359**	**100**

The vast majority of respondents in Table 4.29, i.e. 302 (94,2%), perceived that secondary school teachers need assistance definitely or in many areas on the skills of organizing learning strategies.

4.7.2.5 Skills of organizing learning material

Table 4.30: Skills of organizing learning material

Q20	Frequency	Percent
Definitely	105	29,2
In many areas	175	48,7
In a few areas	62	17,3
Definitely not	8	2,2
I am not sure	9	2,5
Total	**359**	**100**

Table 4.30 shows that the majority of respondents, i.e. 280 (77,9%), perceived that secondary school teachers need assistance definitely or in many areas on the skills of organizing learning material.

4.7.2.6 Summary of the main findings regarding organizational skills

According to the information obtained from the tables above, the majority of respondents felt that secondary school teachers definitely or in many areas need assistance in all the identified organizational skills. The percentages of

respondents that are in agreement with the statement above range from 77,9% to 84,2%

4.7.3 Enrichment

4.7.3.1 Evaluation of skills in the classroom

Table 4.31: Evaluation of skills in the classroom

Q21	Frequency	Percent
Definitely	102	28,6
In many areas	162	45,4
In a few areas	81	22,7
Definitely not	7	2,0
I am not sure	5	1,4
Total	**357**	**100**

The majority of respondents in Table 4.31, i.e. 264 (74%), perceived that secondary school teachers need enrichment definitely or in many areas regarding evaluation skills in the classroom. Two respondents did not respond.

4.7.3.2 Individual teaching and individualized teaching

Table 4.32: Individual teaching and individualized teaching

Q22	Frequency	Percent
Definitely	116	32,6
In many areas	148	41,6
In a few areas	75	21,1
Definitely not	12	3,4
I am not sure	5	1,4
Total	**356**	**100**

Table 4.32 shows that the majority of respondents, i.e. 274 (74,2%), perceived that secondary school teachers need enrichment definitely or in

many areas on the aspect of individual teaching and individualized teaching. Three respondents did not respond.

4.7.3.3 Differentiated teaching

Table 4.33: Differentiated teaching

Q23	Frequency	Percent
Definitely	113	31,7
In many areas	156	43,7
In a few areas	66	18,5
Definitely not	5	1,4
I am not sure	17	4,8
Total	**357**	**100**

The majority of respondents in Table 4.33, i.e. 269 (75,4%), felt that secondary school teachers need enrichment definitely or in many areas on the aspect of differentiated teaching. Two respondents did not respond.

4.7.3.4 Motivation of students

Table 4.34: Motivation of students

Q24	Frequency	Percent
Definitely	149	41,9
In many areas	149	41,9
In a few areas	52	14,6
Definitely not	4	1,1
I am not sure	2	0,6
Total	**356**	**100**

The majority of respondents in Table 4.32, i.e. 198 (83,8%), perceived that secondary school teachers need enrichment definitely or in many areas on how to motivate students. Three respondents did not respond.

4.7.3.5 Team teaching

Table 4.35: Team teaching

Q25	Frequency	Percent
Definitely	135	37,8
In many areas	143	40,1
In a few areas	59	16,5
Definitely not	14	3,9
I am not sure	6	1,7
Total	**357**	**100**

Table 4.35 shows that the majority of respondents, i.e. 278 (77,9%), felt that secondary school teachers definitely or in many areas need enrichment on the aspect of team teaching. Two respondents did not respond.

4.7.3.6 Project teaching

Table 4.36: Project teaching

Q26	Frequency	Percent
Definitely	113	31,7
In many areas	148	41,5
In a few areas	64	17,9
Definitely not	17	4,8
I am not sure	15	4,2
Total	**357**	**100**

Table 4.36 shows that the majority of respondents, i.e. 261 (72,2%), felt that secondary school teachers definitely or in many areas need enrichment on the aspect of teaching through projects. Two respondents did not respond.

4.7.3.7 Teaching through discussion

Table 4.37: Teaching through discussion

Q27	Frequency	Percent
Definitely	101	28,3
In many areas	149	41,7
In a few areas	98	27,5
Definitely not	8	2,2
I am not sure	1	0,3
Total	**357**	**100**

The majority of respondents in Table 4.37, i.e. 250 (70%), felt that secondary school teachers definitely or in many areas need enrichment on the aspect of teaching through discussion. Two respondents did not respond.

4.7.3.8 Teaching through examples

Table 4.38: Teaching through examples

Q28	Frequency	Percent
Definitely	106	29,5
In many areas	173	48,2
In a few areas	67	18,7
Definitely not	9	2,5
I am not sure	4	1,1
Total	**359**	**100**

Table 4.38 shows that the majority of respondents, i.e. 279 (77,7%), perceived that secondary school teachers definitely or in many areas need enrichment on the aspect of teaching through examples.

4.7.3.9 Teaching through co-operative learning strategy

Table 4.39: Teaching through co-operative learning strategy

Q29	Frequency	Percent
Definitely	148	41,3
In many areas	148	41,3
In a few areas	53	14,8
Definitely not	5	1,4
I am not sure	4	0,1
Total	**358**	**100**

Table 4.39 shows that the vast majority of respondents, i.e. 296 (82,6%), felt that secondary school teachers definitely or in many areas need enrichment on teaching through co-operative learning strategy. One respondent did not respond.

4.7.3.10 Teaching through inquiry strategy

Table 4.40: Teaching through inquiry strategy

Q30	Frequency	Percent
Definitely	131	36,7
In many areas	141	39,5
In a few areas	61	17,1
Definitely not	10	2,8
I am not sure	14	3,9
Total	**357**	**100**

The majority of respondents in Table 4.40, i.e. 272 (76,2%), felt that secondary school teachers definitely or in many areas need enrichment on teaching through inquiry strategy. Two respondents did not respond.

4.7.3.11 Teaching through problem solving

Table 4.41: Teaching through problem solving

Q31	Frequency	Percent
Definitely	151	42,5
In many areas	132	36,9
In a few areas	61	17,0
Definitely not	10	2,8
I am not sure	4	1,1
Total	**358**	**100**

Table 4.41 shows that the majority of respondents, i.e. 283 (79,4%), felt that secondary school teachers definitely or in many areas need enrichment on teaching through problem solving. One respondent did not respond.

4.7.3.12 Making decisions in the classroom

Table 4.42: Making decisions in the classroom

Q32	Frequency	Percent
Definitely	102	28,4
In many areas	138	38,4
In a few areas	98	27,3
Definitely not	16	4,5
I am not sure	5	1,4
Total	**359**	**100**

Table 4.42 shows that the majority of respondents, i.e. 240 (66,8%), felt that secondary school teachers definitely or in many areas need enrichment on the aspect of making decisions in the classroom.

4.7.3.13 Summary of the main findings regarding enrichment

According to the information obtained from the table above, the majority of respondents felt that secondary school teachers definitely or in many areas need enrichment on all teaching skills and teaching strategies identified. The

percentages of respondents in all these items that are in agreement with the statement above range from 66,8% to 83,8%.

4.7.4 Didactic-professional needs

4.7.4.1 Improvement of academic competence of underqualified teachers

Table 4.43: Improvement of academic competence of underqualified teachers

Q33	Frequency	Percent
Definitely	229	63,8
In many areas	78	21,7
In a few areas	30	10,0
Definitely not	8	2,2
I am not sure	8	2,2
Total	**359**	**100**

The vast majority of respondents in Table 4.43, i.e. 307 (85,5%), felt that there is definitely or in many areas a need for underqualified teachers to improve their academic competence to be able to teach effectively in the classroom.

4.7.4.2 Provision of academic competence required by curricular changes

Table 4.44: Provision of academic competence required by curricular changes

Q34	Frequency	Percent
Definitely	207	57,6
In many areas	100	27,9
In a few areas	39	10,9
Definitely not	5	1,4
I am not sure	8	2,2
Total	**359**	**100**

Table 4.44 shows that the vast majority of respondents, i.e. 307 (85,5%), felt that teachers definitely or in many areas need the provision of academic competence required by curricular changes.

4.7.4.3 Updating of teachers' knowledge and skills to enable them to cope with professional technological changes

Table 4.45: Updating of teachers' knowledge and skills to enable them to cope with professional technological changes

Q35	Frequency	Percent
Definitely	230	64,6
In many areas	87	24,4
In a few areas	28	7,9
Definitely not	8	2,2
I am not sure	3	0,8
Total	**356**	**100**

The vast majority of respondents in Table 4.45, i.e. 317 (89%), perceived that there is definitely or in many areas a need of updating of teachers' knowledge and skills to be able to cope with professional technological changes. Three respondents did not respond.

4.7.4.4 Teaching skills

Table 4.46: Teaching skills

Q36	Frequency	Percent
Definitely	176	47,9
In many areas	126	35,3
In a few areas	54	15,1
Definitely not	2	0,6
I am not sure	4	1,1
Total	**357**	**100**

Table 4.46 shows that the vast majority of respondents, i.e. 302 (83,2%), felt that secondary school teachers definitely or in many areas need knowledge of teaching skills. Two respondents did not respond to this item.

4.7.4.5 Teaching strategies

Table 4.47: Teaching strategies

Q37	Frequency	Percent
Definitely	181	50,8
In many areas	112	31,5
In a few areas	56	15,7
Definitely not	4	1,1
I am not sure	3	0,8
Total	**356**	**100**

The vast majority of respondents in Table 4.47, i.e. 293 (82,3%), felt that secondary school teachers definitely or in many areas need knowledge of teaching strategies. Three respondents did not respond to this item.

4.7.4.6 Evaluation skills

Table 4.48: Evaluation skills

Q38	Frequency	Percent
Definitely	125	34,9
In many areas	137	38,3
In a few areas	80	22,3
Definitely not	10	2,8
I am not sure	6	1,7
Total	**358**	**100**

Table 4.48 shows that the majority of respondents, i.e. 262 (73,2%), perceived that secondary school teachers definitely or in many areas need evaluation skills. One respondent did not respond to this item.

4.7.4.7 Decision making skills

Table 4.49: Decision making skills

Q39	Frequency	Percent
Definitely	147	41,1
In many areas	123	34,4
In a few areas	72	20,1
Definitely not	11	3,1
I am not sure	5	1,4
Total	**358**	**100**

The majority of respondents in Table 4,49, i.e. 270 (75,5%), perceived that secondary school teachers definitely or in many areas need decision making skills. One respondent did not respond.

4.7.4.8 Knowledge of the child

Table 4.50: Knowledge of the child

Q40	Frequency	Percent
Definitely	150	41,9
In many areas	143	39,9
In a few areas	50	14,0
Definitely not	10	2,8
I am not sure	5	1,4
Total	**358**	**100**

Table 4.50 shows that the vast majority of respondents, i.e. 293 (81,8%), felt that teachers definitely or in many areas need knowledge of the child. One respondent did not respond.

4.7.4.9 Organizational skills

Table 4.51: Organizational skills

Q41	Frequency	Percent
Definitely	128	35,8
In many areas	139	38,8
In a few areas	79	22,1
Definitely not	5	1,4
I am not sure	7	2,0
Total	**358**	**100**

The majority of respondents in Table 4.51, i.e. 267 (74,6%), felt that secondary school teachers definitely or in many areas need organizational skills. One respondent did not respond to this item.

4.7.4.10 Summary of the main findings regarding didactic-professional needs of secondary school teachers

The majority of respondents in the nine tables above felt that secondary school teachers definitely or in many areas need all the identified didactic-professional needs identified in Chapter 2. The responses that are in agreement with the above statement of all items range from 73,2% to 89%.

4.8 INTERPRETATION OF DATA ON INSERVICE TRAINING PROGRAMMES IN THE NORTHERN PROVINCE

Part three of the questionnaire was designed to gather information on inservice training programmes in the Northern Province. Just like in parts one and two, frequencies and percentages were used in interpreting the data on inservice training programmes in the Northern Province. Again here the presentation follows the format of the questionnaire.

4.8.1 Opportunities for inservice training in the Northern Province

4.8.1.1 Appraisal of teaching activities in the classroom

Table 4.52: Appraisal of teaching activities in the classroom

Q42	Frequency	Percent
Excellent	18	5,0
Good	30	8,4
Average	54	15,0
Fair	44	12,3
Poor	213	59,3
Total	**359**	**100**

Table 4.52 shows that the majority of respondents, i.e. 257 (71,6%), perceived that appraisal of teaching activities in the classroom is fair or poor.

4.8.1.2 Reflective practice of teachers

Table 4.53: Reflective practice of teachers

Q43	Frequency	Percent
Excellent	12	3,3
Good	39	10,9
Average	74	20,6
Fair	63	17,5
Poor	171	47,6
Total	**359**	**100**

The majority of respondents in Table 4.53, i.e. 234 (65,1%), felt that reflective practice of teachers is fair or poor.

4.8.1.3 Teachers observing lessons of their colleagues

Table 4.54: Teachers observing lessons of their colleagues

Q44	Frequency	Percent
Excellent	6	2,5
Good	24	6,7
Average	40	11,1
Fair	62	17,3
Poor	224	62,4
Total	**359**	**100**

Table 4.54 shows that the majority of respondents, i.e. 286 (79,7%), felt that the act of teachers observing lessons of their colleagues is fair or poor.

4.8.1.4 Staff meetings

Table 4.55: Staff meetings

Q45	Frequency	Percent
Excellent	49	13,7
Good	77	21,5
Average	134	36,6
Fair	74	20,7
Poor	27	7,5
Total	**358**	**100**

The majority of respondents in Table 4.55, i.e. 236 (64,8%), felt that staff meetings in secondary schools are average or below average. One respondent did not respond.

4.8.1.5 University programmes for improving teachers' academic competence

Table 4.56: University programmes for improving teachers' academic competence

Q46	Frequency	Percent
Excellent	29	8,1
Good	48	13,4
Average	103	28,7
Fair	98	27,3
Poor	81	22,6
Total	**359**	**100**

Table 4.56 shows that the majority of respondents, i.e. 282 (78,6%), felt that current university programmes for improving teachers' academic competence are average or below average.

4.8.1.6 University programmes for improving teachers' academic-professional competence

Table 4.57: University programmes for improving teachers' academic-professional competence

Q47	Frequency	Percent
Excellent	28	7,8
Good	52	14,5
Average	103	28,7
Fair	101	28,1
Poor	75	20,9
Total	**359**	**100**

The majority of respondents in Table 4,57, i.e. 278 (77,7%), felt that current university programmes for improving teachers' academic-professional competence in the Northern Province are average or below average.

4.8.1.7 College programmes that aim at improving professional competence

Table 4.58: College programmes that aim at improving professional competence

Q48	Frequency	Percent
Excellent	28	7,8
Good	48	13,4
Average	64	17,9
Fair	127	35,6
Poor	90	25,2
Total	**357**	**100**

Table 4.58 shows that the majority of respondents, i.e. 217 (60,8%), perceived that college programmes that aim at improving the professional competence are fair or poor. Two respondents did not respond.

4.8.1.8 Short courses and seminars at the inservice training centres

Table 4.59: Short courses and seminars at the inservice training centres

Q49	Frequency	Percent
Excellent	29	8,1
Good	60	16,8
Average	59	16,5
Fair	129	33,9
Poor	88	24,6
Total	**357**	**100**

The majority of respondents in Table 4.59, i.e. 217 (58,5%), felt that short courses and seminars at the inservice training centres are fair or poor.

4.8.1.9 Other courses and seminars for teachers

Table 4.60: Other courses and seminars for teachers

Q50	Frequency	Percent
Excellent	17	9,6
Good	25	14,1
Average	32	18,1
Fair	37	20,9
Poor	66	37,3
Total	**177**	**100**

Nor all respondents responded to this item. Only 177 of 359 respondents responded. Those who responded directed their responses to regional or decentralised courses. Table 4.60 shows that the majority of those who responded, i.e. 103 (58,2%), felt that regional courses are fair or poor.

4.8.1.10 Summary of the main findings regarding opportunities for inservice education and training in the Northern Province

The majority of respondents felt that the following opportunities for inservice education and training in the Northern Province are average or below average:

- Staff meetings (cf. 3.3.1.6).
- University programmes for improving teachers' academic competence (cf. 3.3.2).
- University programmes for improving teachers' professional competence (cf. 3.3.3).

The majority of the respondents also felt that the following opportunities for inservice education and training in the Northern Province are fair or poor:

- Appraisal of teaching activities in the classroom (cf. 3.3.1.1).
- College programmes that aim at improving professional competence (cf. 3.3.4).

- Reflective practice of teachers (cf. 3.3.1.2).
- Teachers observing lessons of their colleagues (cf. 3.3.1.3).
- Short courses and seminars at the inservice training centres (cf. 3.3.5).
- Regional or decentralised courses (cf. 3.4.3).

4.8.2 Departmental inservice education and training programmes

4.8.2.1 Class visits by circuit managers

Table 4.61: Class visits by circuit managers

Q51	Frequency	Percent
Very frequently occurs	8	2,2
Often occurs	14	3,9
Sometimes occurs	25	7,0
Rarely occurs	311	86,9
Total	**358**	**100**

The majority of respondents in Table 4.61, i.e. 336 (93,9%), felt that class visits by circuit managers in secondary schools sometimes occurs or rarely occurs. One respondent did not respond to this item.

4.8.2.2 Panel inspection

Table 4.62: Panel inspection

Q52	Frequency	Percent
Very frequently occurs	5	1,4
Often occurs	10	2,8
Sometimes occurs	17	4,7
Rarely occurs	326	91,1
Total	**358**	**100**

According to Table 4.62 the vast majority of respondents, i.e. 343 (95,8%), felt that panel inspection sometimes occurs or rarely occurs. One respondent did not respond to this item.

4.8.2.3 Assistance to secondary school teachers by subject advisors

Table 4.63: Assistance to secondary school teachers by subject advisors

Q53	Frequency	Percent
Very frequently occurs	12	3,4
Often occurs	21	5,9
Sometimes occurs	57	15,9
Rarely occurs	268	74,9
Total	**358**	**100**

The majority of respondents in Table 4.63, i.e. 325 (90,8%), felt that assistance to secondary school teachers by subject advisors sometimes occurs or rarely occurs. One respondent did not respond to this item.

4.8.2.4 Subject committee meetings

Table 4.64: Subject committee meetings

Q54	Frequency	Percent
Very frequently occurs	18	5,0
Often occurs	57	16,0
Sometimes occurs	134	37,5
Rarely occurs	148	41,5
Total	**357**	**100**

According to Table 4.64, the majority of respondents, i.e. 282 (79%), felt that subject committee meetings sometimes occurs or rarely occurs. Two respondents did not respond.

4.8.2.5 Other meetings

Table 4.65: Other meetings

Q55	Frequency	Percent
Very frequently occurs	15	8,8
Often occurs	24	14,0
Sometimes occurs	59	34,5
Rarely occurs	73	42,7
Total	**171**	**100**

Not all respondents responded to this item. Only 171 respondents out of 359 responded. Those who responded directed their responses to teachers unions meetings. Table 4.65 shows that the majority of those who responded, i.e. 130 (77,2%), felt that union meetings sometimes occur or rarely occur.

4.8.2.6 Types of inservice education and training

Table 4.66: Types of inservice education and training

Q56	Frequency	Percent
Distance	40	11,3
School based	160	45,1
Regional course	146	41,1
Others	9	2,5
Total	**355**	**100**

Table 4.66 shows that the vast majority of respondents, i.e. 306 (86,2%), preferred school based or regional based inservice education and training.

4.8.2.7 Institutions that need to provide inservice education and training

Table 4.67: Institutions that need to provide inservice education and training

Q57	Frequency	Percent
Department	305	85,9
School	7	2,0
University	25	7,0
College	12	3,4
Technikon	2	0,6
Others	4	1,1
Total	**355**	**100**

The majority of respondents in Table 4.67, i.e. 305 (85,9%), felt that inservice education and training should primarily be provided by the Department of Education in the Northern Province. Four respondents did not respond to this item.

4.8.2.8 What is lacking in the provision of inservice training of secondary school teachers?

According to the information obtained in the table above, it was found that the following sometimes occurs or rarely occurs in secondary schools in the Northern Province:

- Class visits by circuit managers (cf. 3.4.1.1).
- Panel inspection (cf. 3.4.1.2).
- Assistance to secondary school teachers by subject advisors (cf. 3.4.1.3).
- Subject committee meetings (cf. 3.4.1.4).

This could be, amongst others, the reason why the Northern Province is known for its high failure rate.

It was also found in the table above that teachers preferred school based or regional based inservice education and training. The vast majority of

respondents also made it clear that inservice education and training should be provided by the department.

359 Respondents also perceived the following as lacking:

- 121 Respondents felt that proper planning and organization of inservice education and training is lacking. This could be the reason why the following departmental inservice education and training programmes sometimes occur in some schools and rarely occur in others.

  * Class visits by circuit managers(cf. 3.4.1.1).
  * Panel inspection (cf. 3.4.1.2).
  * Assistance to secondary school teachers by subject advisors (cf. 3.4.1.3).
  * Subject committee meetings (cf. 3.4.1.4).

- 87 Respondents felt that there is a lack of subject advisors in some subjects. This could be the reason why assistance to secondary school teachers by subject advisors sometimes occurs in some schools and rarely occurs in others.

- 60 Respondents felt that inservice training centres only cater for teachers teaching grade 12. This could be the reason why the courses and seminars at the inservice training centres were perceived as being fair or poor.

- 23 Respondents felt that the government lacks experience of providing inservice education and training. It could be the reason why inspectors of schools and subject advisors are not encouraged to visit the schools to give the necessary help or guidance.

- 22 Respondents felt that inservice training centres lack facilities and equipment. This could be the reason why they cater only for grade 12 teachers.

- 22 Respondents felt that trainers at inservice training centres are not qualified for the type of work they are doing. It could be the reason why the courses are perceived as either fair or poor.

- 8 Respondents felt that examiners of grade 12 in the inservice training centres and elsewhere usually come unprepared which makes lectures boring and time wasting.

- 6 Respondents felt that the Department of Education lacks commitment to organize inservice education and training of teachers. This can be seen in the way in which class visits by inspectors of schools and subject advisors are conducted.

4.8.2.9 The most positive aspects of the provision of inservice education and training of secondary school teachers

The following were responses of 343 managers, teachers and subject advisors:

- 125 Respondents felt that inservice education and training enables teachers to learn how to teach and get to know the learning material.

- 59 Respondents felt that inservice education and training helps teachers to adapt themselves to the changing needs and conditions in the teaching profession.

- 57 felt that inservice education and training gives teachers a chance to meet the examiners of grade 12 where they can share ideas with them.

- 44 felt that inservice education and training helps to improve teachers' competence.

- 32 felt that inservice education and training helps teachers to identify their weak points.

- 21 felt that inservice education and training enables secondary school teachers to get more strategies of how to teach other aspects.

- 3 Respondents felt that inservice education and training helps teachers to identify problems common to most schools.

- 2 felt that inservice education and training gives teachers confidence and motivation.

- 16 Respondents did not respond to this item.

4.8.2.10 Additions by respondents

The following were additions by 333 managers, teachers and subject advisors:

- 80 Respondents felt that all secondary school teachers need to attend courses at the inservice training centres.

- 57 felt that a few teachers need to be selected to train at tertiary level and come back to retrain other teachers. This could help teachers to cope with curriculum 2005.

- 52 felt that there should be more contact amongst teachers teaching the same subject.

- 42 felt that inservice training centres should be the store house regarding the didactic-professional needs of teachers.

- 40 felt that class visits should be done by officials from the Department.

- 26 felt that the Department should appoint more officers in the advisory service to assist in giving teachers support where necessary.

- 18 felt that subject advisors should conduct class visits.

- 15 felt that there should be cooperation between government, private sectors, NGO's and teachers.

- 3 felt that regional courses are expensive for teachers transport wise. To reduce these expenses, circuit courses and even area courses should be ideal.

- 26 respondents did not respond to this item.

4.9 SUMMARY

The chapter presented the aim of the empirical study, the design of the research, and the analysis of the data and inferential statistics which include effect size (d-value) techniques. The findings were as follows:

- Professionally and academically it can be said that the majority of teachers in the Northern Province are well qualified.

- Teachers need assistance in all the identified organizational skills.

- Teachers need enrichment of teaching skills and teaching strategies.

- Teachers need all the identified didactic-professional needs.

- There is a need for improvement of the present opportunities for inservice education and training in the Northern Province.

- There is a need for improvement in all the identified departmental inservice education and training programmes.

- All the identified needs under organizational skills are urgent needs.

- All the identified needs regarding enrichment are urgent needs.

- All the identified didactic-professional needs of secondary school teachers are urgent needs.

- The first six identified needs on opportunities for inservice education and training in the Northern Province are urgent needs.

- The first three identified needs regarding departmental inservice education and training are urgent needs.
- Few teachers are at present involved in the improvement of academic qualifications.

The next chapter will be the conclusion and recommendations.

CHAPTER 5

5. CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

This study aimed at answering the question: How can the didactic-professional training needs of secondary school teachers be met by means of inservice education and training in the Northern Province? 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. This is followed by findings, recommendations, approaches to implement the recommendations and further research.

5.2 SUMMARY

Chapter 1 dealt with the background of the study and the problem of research was stated. The research objectives were given. A division according to the chapters was made.

Chapter 2 addressed the first objective of this survey, i.e. to identify the didactic-professional inservice education and training needs of secondary school teachers. The chapter started by giving some general aspects of the classroom situation followed by the identification of didactic-professional needs of secondary school teachers.

In Chapter 3 the second objective was addressed. A description of the provision of inservice education and training of secondary school teachers in the Northern Province was made. The chapter started by giving the aim of inservice education and training followed by inservice education and training

opportunities in educational institutions, departmental inservice education and training programmes and non governmental organizations' inservice education and training.

In Chapter 4, the third objective was addressed. The empirical survey was presented. Attention was given to the aim of the empirical study, the design of the research and the interpretation of data collected by means of a questionnaire.

5.3 RESEARCH FINDINGS

5.3.1 Findings with regard to objective 1

Regarding objective 1, namely to identify the didactic-professional needs of secondary school teachers, the following were identified:

- Underqualified teachers need to improve their academic competence (cf. 2.3.1).
- Teachers need to be provided with academic competence required by curricular changes (cf. 2.3.2).
- Teachers' knowledge and skills need to be updated to be able to cope with professional technological changes in the classroom (cf. 2.4).
- Secondary school teachers' professional competence need to be improved (cf. 2.5).
- Secondary school teachers need to be appraised in the classroom situation (cf. 2.6).

5.3.2 Findings with regard to objective 2

Regarding objective 2, namely to describe the provision of inservice education and training of teachers in the Northern Province, the following findings were made:

- Inservice education and training opportunities in educational institutions in the Northern Province are grouped into:
  - * School based activities that aim at developing teaching experience and performance (cf. 3.3.1).
  - * University programmes for improving teachers' academic competence (cf. 3.3.2).
  - * University programmes for improving teachers' professional competence (cf. 3.3.3).
  - * College programmes that aim at improving professional competence (cf. 3.3.4).
  - * Courses and seminars conducted at the inservice training centres (cf. 3.3.5).
- Departmental inservice education and training programmes in the Northern Province are grouped into:
  - * Class visits (cf. 3.4.1).
  - * Subject committee meetings (cf. 3.4.2).
  - * Regional or decentralised courses (cf. 3.4.3).

5.3.3 Findings with regard to objective 3

Regarding objective 3, i.e. to determine the short comings of and possible strategies for programmes being used in the Northern Province to satisfy these needs, the following findings were made:

- Appraisal of teaching activities in the classrooms is fair or poor (cf. 4.8.1.1).
- Reflective practice of teachers is fair or poor (cf. 4.8.1.2).
- The process of teachers observing lessons of their colleagues is fair or poor (cf. 4.8.1.3).

- Staff meetings in secondary schools are average or below average (cf. 4.8.1.4).

- University programmes for improving teachers' academic competence are average or below average (cf. 4.8.1.5).

- University programmes for improving teachers' academic-professional competence are average or below average (cf. 4.8.1.6).

- College programmes that aim at improving professional competence are fair or poor (cf. 4.8.1.7).

- Short courses and seminars at the inservice training centres are fair or poor (cf. 4.8.1.8).

- Class visits by circuit managers in secondary schools sometimes occur or rarely occur (cf. 4.8.2.1).

- Panel inspection sometimes occurs or rarely occurs (cf. 4.8.2.2).

- Assistance to secondary school teachers by subject advisors sometimes occurs or rarely occurs (cf. 4.8.2.3).

- Subject committee meetings sometimes occur or rarely occur (cf. 4.8.2.4).

5.4 RECOMMENDATIONS

These recommendations are based on literature review and the empirical study.

5.4.1 School level

- Teachers need to be appraised to help them to identify their weak points and also to give them advice in their teaching. In the empirical study in Chapter 4 it was found that appraisal of teaching activities in the classroom is fair or poor (cf. 4.8.1.1). Principals, deputy principals and heads of departments need to be involved in this process.

- In view of the findings in Chapter 4 of the fact that reflective practice of teachers is fair or poor (cf. 4.8.1.2), school principals, deputy principals and departmental heads need to create conditions favourable to teachers to collaborate and to operate in their schools. Teachers need to feel free to raise problems they are faced with in the classroom either in staff meetings or elsewhere in order to get solutions from their colleagues.

- Panel inspection needs to be conducted in each and every secondary school. Inspectors of schools need to come as a group to a particular school to help each and every teaching member of staff in the act of teaching. In the empirical study in Chapter 4, it was found that panel inspection sometimes occurs or rarely occurs (cf. 4.8.2.2). The strategy could be successful if inspectors do not come as fault finders but as helpers in the act of teaching.

- Subject advisors need to give assistance to secondary school teachers through class visits to help them identify areas that need to be improved. In the previous chapter it was found that assistance to secondary school teachers by subject advisors sometimes occurs or rarely occurs (cf. 4.8.2.3).

5.4.2 Circuit level

There should be collaboration and co-operation at circuit level amongst teachers teaching the same subject. This can be done through circuit subject committee meetings. In the empirical study it was found that subject committee meetings sometimes occur or rarely occur (cf. 4.8.2.4). Meetings of this kind should be convened regularly. Teachers experiencing problems in other aspects of the subject matter need to feel free to ask help from teachers from other schools in these meetings.

5.4.3 Inservice training centres level

Short courses and seminars need to be conducted regularly at the inservice training centres. In the empirical study it was found that short courses and seminars at the inservice training centres are fair or poor (cf. 4.8.2). Lecturers

and experts from these institutions need to conduct these courses. The courses and seminars should cater for all teachers irrespective of the grades they are teaching. In the previous chapter it was found that inservice training centres only cater for teachers teaching grade 12 (cf. 4.8.2.8).

5.4.4 University and college level

Universities and colleges within the Northern Province need to develop programmes for improving academic-professional competence of teachers in order to have a thorough knowledge of, amongst others, teaching skills, organizational skills, teaching strategies and knowledge of the child. In the previous chapter it was found that university programmes for improving teachers' academic competence are average or below average (cf. 4.8.1.5). It was also found that university programmes for improving teachers' professional competence are average or below average (cf. 4.8.1.6). With regard to colleges it was found that college programmes that aim at improving the professional competence are average or below average (cf. 4.8.1.7).

5.4.5 Regional level

When curricular changes are effected teachers need to be provided with the academic competence required by curricular changes. This could be provided by subject advisors and experts form institutions of higher learning in the form of regional courses. In the empirical study in Chapter 4 it was found that teachers prefer regional courses (4.8.2.6).

5.4.6 Departmental level

The Department of Education in the Northern Province needs to take the following into consideration:

- In view of the findings of the fact that 32% of the respondents were underqualified (cf. 4.4.3), underqualified teachers need to be encouraged to improve their academic competence in institutions of higher learning. Leave needs to be granted to these teachers. This may also help teachers to cope with changes that keep on coming in the teaching situation.

- The Department needs to employ more subject advisors. In the previous chapter it was found that there is a lack of subject advisors in some subjects (cf. 4.8.2.8). Each area office needs to have subject advisors for all the subjects.

- The Department needs not run away from its responsibility of providing inservice education and training. More experts need to be employed as lecturers at the inservice training centres to help teachers with their didactic-professional needs.

5.5 PROPOSED APPROACH TO IMPLEMENT THE RECOMMENDATIONS

One can never be prescriptive in this regard but what follows are suggested ways, according to O'Brien (1992:424), that may prove to be effective in effecting the implementation of the recommendations:

- Recognition and acknowledgement of teachers as fellow adult professionals with individual needs, and attempts to meet them where they are should be made when effecting the implementation of the recommendations. Ice breaking activities that encourage low risk sharing of concern are effective.

- Attempts should be made to seek to sell the philosophy of active, participatory, co-operative learning.

- The implementation of the recommendations needs to address informal and personal concern before providing detailed management and consequence information. If the group is highly diverse in terms of prior experience, the presentation may be split up to provide for more individualized options.

- A sense of community and shared responsibility for learning and teaching needs to be built by encouraging questionings, risk taking, experimentation and collaborative problem solving.

- A feeling of passive consumerism needs to be countered by encouraging teachers to share ideas, activities and resources in scheduled workshops, or informally during breaks and mealtimes.

- Workshop evaluations that address the evaluation of teachers concerned should be included, and ideas for follow ups should be explored.

5.6. FURTHER INVESTIGATION

The following area appears to need further investigation:

- An analysis of improvement of academic-professional competence of teachers already in service through distance education in the Northern Province.

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APPENDIX A

DIDACTICAL-PROFESSIONAL INSERVICE TRAINING NEEDS OF SECONDARY SCHOOL TEACHERS IN THE REGION OF THE NORTHERN PROVINCE

Office use only

Survey number | | | | (1-3)

INSTRUCTIONS

1. *Please do not write your name or that of your school on one of the forms. 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: BIOGRAPHICAL AND DEMOGRAPHICAL DATA

N.B. Circle the appropriate number.

1. Your sex?

Male	1	(4)
Female	2	

2. Your age

20-29 years	1	(5)
30-39 years	2	
40-49 years	3	
50+ years	4	

3. What is your highest **academic** qualifications?

Std. 10	1	(6)
B.degree	2	
B.Ed./honours	3	
M. degree	4	
D. degree	5	

4. What is your highest **professional** qualifications?

PTC	1	(7)
JSTC	2	
SPTC	3	
STD	4	
UED/HED	5	
Intergrated degree	6	

5. Position you occupy?

Principal	1	(8)
Deputy Principal	2	
Department head	3	
Teacher	4	
Subject advisor	5	

6. Number of years in the position you occupy.

0-5 years	1	(9)
6-10 years	2	
11-15 years	3	
16-20 years	4	
21+ years	5	

7. Highest **academic** training you received for the subject you are teaching?

Senior degree	1	(10)
Course three of a degree	2	
Course two of a degree	3	
Course one of a degree	4	
College training	5	
Std 10	6	
None	7	

PART TWO: PROVISION OF INSERVICE TRAINING

N.B. Circle the appropriate number in a block from question 8 to 15.

8. If you are involved in classroom teaching have you improved your **academic** qualifications while you are working.

Yes	1	(11)
No	2	
Not applicable	3	

9. If yes, from which institution?

University of the North	1	(12)
University of Venda	2	
Other universities	3	
Technikon in the Northern Province	4	
Technikon outside the Northern Province	5	
Not applicable	6	

10. Have you earned a **post graduate** degree or techinikon diploma while you are working?

Yes	1	(13)
No	2	

11. If yes, from which institution?

University of the North	1	(14)
University of Venda	2	
Other universities	3	
Technikon in the Northern Province	4	
Technikon outside the Northern Province	5	
Not applicable	6	

12. If you are involved in classroom teaching, have you improved your **professional** qualifications while you are working?

Yes	1	(15)
No	2	

13 If yes, from which institution?

University inside the Northern Province	1	(16)
University outside the Northern Province	2	
College inside the Northern Province	3	
College outside the Northern Province	4	
Technikon inside the Northern Province	5	
Technikom outside the Northern Province	6	
Onthers (specify)	7	
Not applicable	8	

14. If you are involved in classroom teaching, are you presently involved with the improvement of your **academic** qualifications?

Yes	1	(17)
No	2	

15 If yes, from which institution?

University of the North	1	(18)
University of Venda	2	
Other universities	3	
College in the Northern Province	4	
College outside the Northern Province	5	
Technikon	6	
Not applicable	7	

ORGANIZATIONAL SKILLS

The following organizational skills are given. Circle the appropriate number for each statement to indicate the degree in which secondary school teachers need assistance on the item using the following key:

1 - Definitely
2 - In many areas
3 - In few areas
4 - Definitely not
5 - I am not sure

16.	Skills of organizing the pupils in the classroom	1	2	3	4	5	(19)
17.	Skills of organizing communication in the classroom.	1	2	3	4	5	(20)
18.	Skills of organizing and managing the learning environment.	1	2	3	4	5	(21)
19.	Skills of organizing learning strategies.	1	2	3	4	5	(22)
20.	Skills of organizing learning material.	1	2	3	4	5	(23)

ENRICHMENT

A scale of values has been supplied alongside each statement. Please indicate on a scale 1-5 to what extent do secondary school teachers need enrichment in the following (circle the appropriate number):

1 - Definitely
2 - In many areas
3 - In few areas
4 - Definitely not
5 - I am not sure

21.	Evaluation skills in the classroom.	1	2	3	4	5	(24)
22.	Individual teaching and individualized teaching.	1	2	3	4	5	(25)
23.	Differentiated teaching.	1	2	3	4	5	(26)
24.	Motivation of students.	1	2	3	4	5	(27)
25.	Team teaching.	1	2	3	4	5	(28)
26.	Project teaching.	1	2	3	4	5	(29)
27.	Teaching through discussion.	1	2	3	4	5	(30)
28.	Teaching through examples.	1	2	3	4	5	(31)
29.	Teaching through co-operative learning strategy.	1	2	3	4	5	(32)
30.	Teaching through inquiry strategy.	1	2	3	4	5	(33)

31.	Teaching through problem solving.	1	2	3	4	5	(34)
32.	Making decisions in the classroom.	1	2	3	4	5	(35)

DIDACTIC PROFESSIONAL NEEDS

Use the following scale to indicate to what extent secondary school teachers need the following didactics professional competences, skills or knowledge. (N.B. Circle the appropriate number.)

1 - Definitely
2 - In many areas
3 - In few areas
4 - Definitely not
5 - I am not sure

33.	Improvement of academic competences of underqualified teachers.	1	2	3	4	5	(36)
34.	Provision of academic competences required by curricular changes.	1	2	3	4	5	(37)
35.	Updating of teachers knowledge and skills to be able to cope with technological changes.	1	2	3	4	5	(38)
36.	Teaching skills.	1	2	3	4	5	(39)
37.	Teaching strategies.	1	2	3	4	5	(40)
38.	Evaluation skills.	1	2	3	4	5	(41)
39.	Decision making skills.	1	2	3	4	5	(42)

40. Knowledge of the child.

1	2	3	4	5

(43)

41. Organizational skills.

1	2	3	4	5

(44)

PART THREE: INSERVICE TRAINING PROGRAMMES IN THE NORTHERN PROVINCE

OPPORTUNITIES FOR INSERVICE TRAINING IN THE NORTHERN PROVINCE

Assess the following opportunities for inservice training in the Northern Province using the following key (N.B. Circle the appropriate number.)

1 - Excellent
2 - Good
3 - Average
4 - Fair
5 - Poor

42.	Appraisal of teaching activities in the classroom.	1	2	3	4	5	(45)
43.	Reflective practice of teachers.	1	2	3	4	5	(46)
44.	Teachers observing lessons of their colleagues.	1	2	3	4	5	(47)
45.	Staff meetings.	1	2	3	4	5	(48)
46.	University programmes for improving teachers' academic competences.	1	2	3	4	5	(49)
47.	University programmes for improving teachers' academic professinal competences.	1	2	3	4	5	(50)
48.	College programmes that aim at improving the professional competences.	1	2	3	4	5	(51)
49.	Short course and seminars conducted at the inservice training centre.	1	2	3	4	5	(52)

50.	Other courses and seminars for teachers (specify).	1	2	3	4	5	(53)

DEPARTMENTAL INSERVICE TRAINING PROGRAMMES

The following are departmental inservice training programmes that are currently being used in the Northern Province. Please indicate the extent to which this to be done by officials (i.e. inspectors and subject advisors) from the department of education and culture by circling the appropriate number for each statement which reflects the extent to which this is done using the following key:

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

51.	Class visits by circuit managers.	1	2	3	4	(54)
52.	Panel inspection.	1	2	3	4	(55)
53.	Assistance to secondary school teachers by subject advisors.	1	2	3	4	(56)
54.	Subject committee meetings.	1	2	3	4	(57)
55.	Other meetings (specify).	1	2	3	4	(58)

56. What type of inservice training do you prefer?

Distance	1	(59)
School-based	2	
Regional courses	3	
Other: specify	4	

57. Who should primarily provide the inservice training?

Department	1	(60)
School	2	
University	3	
College	4	
Technikon	5	
Other: specify	6	

58. What is lacking in the provision of inservice training of secondary school teachers to satisfy secondary teachers' didactic-professional needs?

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59. What is the most positive aspect of the provision of inservice training of secondary school teachers regarding the didactic professional needs?

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60. Would you like to add anything?

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APPENDIX B

P.O. Box 74
TSHILAPHALA

10th December 1997

The Regional Director
Department of Education and Culture
Private Bag X2250
SIBASA
0970

Sir

I am conducting a study titled:

THE DIDACTIC-PROFESSIONAL IN SERVICE TRAINING NEEDS OF SECONDARY SCHOOL TEACHERS IN A REGION OF THE NORTHERN PROVINCE.

I am studying at PU for CHE for Masters degree in Education. Your region covers the population of the study. I wish to request you to allow me to distribute the questionnaire in the schools and offices of education in your region.

Yours faithfully

P.M. SIKHAVHAKHAVHA

APPENDIX C

Northern Transvaal Province
EDUCATION, ARTS, CULTURE & SPORTS

TEL: (21331)Ext.
FAX: (0159)
REFERENCE NO:
ENQUIRIES: G.N. MAHLALE

Private Bag X 2250
SIBASA
0970

11 DECEMBER 1997

P.M. Sikhavhakhavha
P.O. Box 74
TSHILAPHALA

REQUEST TO DISTRIBUTE THE QUESTIONNAIRE AT SCHOOLS AND OFFICES OF EDUCATION IN REGION THREE

1. Permission is hereby granted for the request indicated above.

2. Your co-operation is appreciated.

REGIONAL DIRECTOR: EDUCATION AND CULTURE