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PERCEPTIONS OF TEACHERS, PRINCIPALS, SUBJECT ADVISORS AND INSPECTORS IN A DEPARTMENT OF EDUCATION IN THE REPUBLIC OF SOUTH AFRICA CONCERNING SELECTED TEACHING COMPETENCY SKILLS AS IN-SERVICE NEEDS OF BLACK SECONDARY SCHOOL TEACHERS

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By

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DEDICATION

This work is dedicated

To my friend and wife, Ragosebo Hunadi, without her support, care and love I would not have succeeded.

To my children: Tshegwane, Masetopa and Mapulanyane. Also my mother, brothers and sisters.

To the beloved memories of my late father and my late first-born twin son, who was named for his grandfather -- to the memories of the two Setlogoanes.

Thank you all.

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I wish to express my sincere gratitude and appreciation to the people and institutions who have helped me reach this milestone in my academic career.

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CHAPTER I

OVERVIEW OF THE STUDY

Introduction

This introductory chapter gives the setting; discusses the problem with which the research is concerned; presents the objectives of the study and its rationale; sets forth the research questions, design of the study, hypotheses, basic assumptions and limitations of the study; defines the terms used in the study; and indicates the organization of the study.

An unprecedented knowledge explosion the world over has resulted in the pursuit for both relevance and excellence upon the part of the teachers and schools. Much of what has been taught in bygone years and how it was taught have become outdated and obsolete. These justify making in-service education available for practicing teachers in almost all education systems.

It is possibly in recognition of this fact that some educators admonish:

> The continuing education of the teacher must be strengthened. We cannot expect a teacher trained twenty years ago to prepare students to live forty years into the future with no policy of systematic continued education for

> the teacher. Even the most dedicated teacher will fall behind, and students will learn how to live, not in the future, but in the past (Michigan Education Association, 1983, p. 11).

Educational authorities should therefore accept that life-long learning is an essential condition for every teacher.

An accepted fact about the teacher's position seems to be that the teacher is the one that has the most direct contact with the students and the one often required to acquire and implement changes. These make him to be in the central position to influence the form and outcomes of whatever improvement occurs.

One of the central flaws in the South African black education system may be lack of flexibility in staff facilities and training programs that go with them. These appear to adversely affect the quality and standard of education. Innovations in the various aspects of the educational system appear possible and could contribute to enlightened teaching strategies and effective learning styles. One of the strategies of bringing these about is identifying the in-service needs of teachers and establishing priorities so that more meaningful and effective staff development programs can be designed and developed.

Setting

It is widely accepted that probably there is no other country like the Republic of South Africa (RSA), with such a variegated pattern of government departments responsible for public education (Potgieter, 1971). Education is administered by provincial and central government departments and is according to the race of the inhabitants served. There are the four systems for Whites, Coloreds, Asiatics, and Blacks.

The Department of Education and Training (DET) administers the education of all the black ethnic groups in the country while providing for the necessary decentralization of powers, duties and functions, thereby purporting to take into account technical and local differences. The DET is divided into what will herein be called "organizations" (See Figure 1.1).

There is an organization which serves the blacks that reside in 'white areas,' and this organization is divided into seven regions each under a regional director (see left-hand column of Figure 1.1);

Cape - station at Cape Town.
Highveld - station at Springs.
Johannesburg - station at Johannesburg.
Natal - station at Pietermaritzburg.
Northern Transvaal - station at Pretoria.

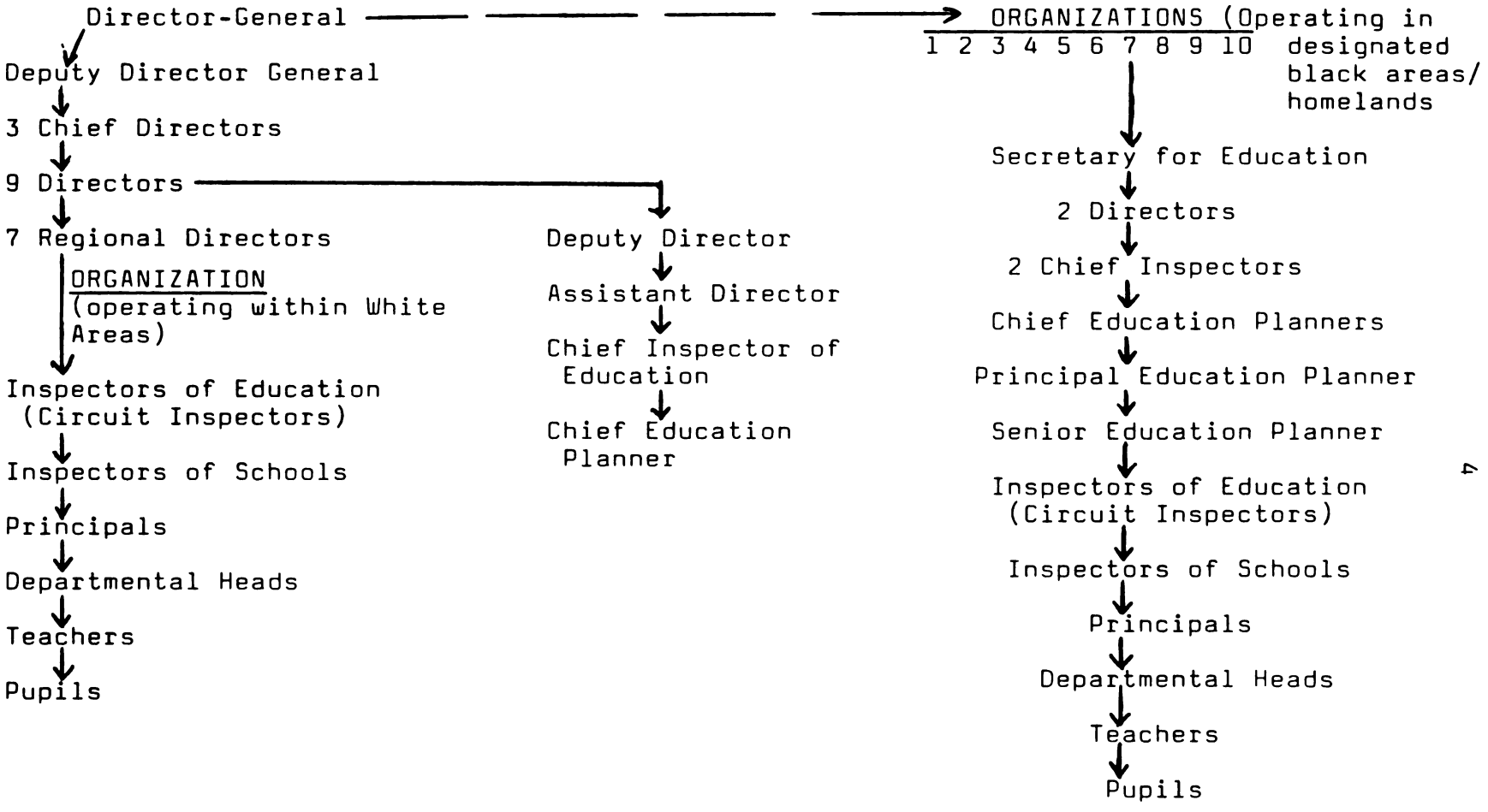

Figure 1.1 Schematic Organizational Chart of the Department of Education and Training (DET), RSA

Orange Free State - station at Bloemfontein.

Orange Vaal - station at Vereeniging.

The other ten organizations are separate homeland education departments that serve blacks in 'black areas.' They are indicated at top of the right-hand column in Figure 1.1 and they are titled as follows:

1. Bophuthatswana - station at Mafikeng.
2. Ciskei - station at Zwelitsha.
3. Gazankulu - station at Giyani.
4. Kangwana - station at Louisville.
5. Kwandebele - station at Dennilton.
6. Kwazulu - station at Ulundi.
7. Lebowa - station at Lebowakgomo.
8. Qwaqwa - station at Witzieshoek.
9. Transkei - station at Umtata.
10. Venda - station at Thohoyandou.

The homeland departments are supposed to be functioning independently under their own secretaries for education, but are subject to the professional control of the DET, which therefore acts as a

> . . . central liason, planning and co-ordinating authority for the education departments of the self-governing Black states. This is particularily in professional matters such as courses, curricula, syllabuses, examinations and general educational standards (Republic of South Africa, 1980/81, p. 637).

For the purposes of control and guidance each department, like regions, is divided into several circuits headed by circuit inspectors.

This study was confined to the Department of Education in Lebowa* (DEL) which is numbered 7 in Fig. 1.1. The DEL is divided into fifteen circuits with a total of 332 secondary schools. According to the 1984 statistical returns, there are 144,487 secondary school children served by 3,421 qualified teachers and 1,211 unqualified teachers. The schools are served by 45 subject advisors and 45 inspectors (see Appendix A).

Statement of the Problem

The research is an attempt to study the in-service needs of black secondary school teachers as seen by the teachers themselves, secondary school principals, subject advisors and inspectors of schools. These in-service needs will be in the form of statements of teaching skills categorized into seven main clusters: developing pupil self, developing personal self, handling classroom problems,

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*Political constraints coupled with accessibility problems throughout the country are reasons for the choice. Because of the fact that these departments are so much alike in the crucial education ways, the selection of any one of these departments would have been as useful for the purpose of this dissertation as the selection of any of the others. Furthermore, for a more valid research and comprehensibility it is advisable to delineate a desirable area of focus.

managing classroom instruction, evaluating and assessing achievement, individualizing instruction, and planning instruction.

The aim will be to prioritize the needs and help in the design and improvement of curriculum of in-service activities so that teachers can have new knowledge and improved skills for effective instruction of the curriculum.

A widely held principle of in-service education is that an in-service education curriculum should not be developed for the staff, but with the staff. The significance of teacher involvement was highlighted by Al-Ghamdi:

> Planning for in-service programs should be based on comprehensive studies of the real needs of the teachers as they, the teachers perceive them and not as they are perceived by the central educational authorities who are removed from the practical experience of teachers and might not be in a good position to dictate what would be best (Al-Ghamdi, 1982, p. 18).

This position is also supported by Ingersoll, who argues that teachers should be involved in decision-making processes because:

1. When teachers are involved at the choice point, they are more likely to carry their interest into actual training.
2. It fails to make financial sense to offer something that has little relevance to teachers' needs.
3. To make all the decision at an administrative level is little more than patronizing (Ingersoll, 1976, p. 169).

Objectives of the Study

1. To assess the in-service needs for instructional skills and competencies of black secondary school teachers as the teachers themselves perceive them, and as principals, subject advisors and school inspectors perceive them.

2. To identify significant differences if any, in the perceptions of in-service needs among teachers, principals, subject advisors, and school inspectors.

3. To make recommendations that are pertinent to the improvement of in-service education for practicing secondary school teachers, based upon the above findings. Such in-service education will hopefully become both more relevant and more meaningful.

4. Findings of the study may be helpful in supporting the concerns of teachers and possibly help in the development of effective instructional strategies for the benefit of students.

5. Since this study focuses on how the four role groups perceive the in-service needs of secondary school teachers, the research results may stimulate further research to determine the significance of such demographic variables as age, sex, years of teaching experience, and levels of academic qualifications, in the perception of in-service needs of secondary teachers and across all school levels.

Rationale for the Study

The following observation taken from a United States context about haphazard planning of some staff development programs is worth noting:

> . . . a little of this and a little of that, a workshop here, and a college course there - none of which is systematically related to a cumulative plan designed to help students achieve learning objectives (Ehrenberg and Brandt, 1976, p. 205).

There is an apparent confusion in the DEL as to what is entailed in professional development. This is evidenced by somewhat vague and over-lapping functions of administrators, as they pertain to staff development. For instance, according to the DEL duty sheets (See Appendix B);

1. The education planner arranges courses for teachers after consultation with the chief inspector, and as suggested by the DET.
2. The chief inspector's duty is to study the professional needs of the circuits.
3. The circuit inspector is responsible for staff development and self-development.
4. The inspector of schools conducts refresher courses for the teaching staff and is in charge of staff development and self-development.
5. The inspector of psychological services organizes and runs courses for guidance teachers.

The picture is that of uncoordinated efforts and suggests a lack of effective means of meeting the needs of teachers. Furthermore, it is unclear how in-service needs of teachers are identified before programs can be designed and developed. It indeed appears from the duty sheets that teachers' needs are generally ignored in the process of decision-making.

The present study will be a 'pioneer study' on the assessment of in-service needs of black secondary school teachers throughout a single department in the South African black educational system. In a study assessing guidance

needs of black secondary school students in the RSA, Chuenyane recommended in-service training to acquaint teachers with modern approaches and methods in guidance:

> Further research is needed to determine needed competencies and characteristics for teachers who will assume the responsibility of guidance in the schools (Chuenyane, 1981, p. 179).

Some of the weaknesses of the efforts in in-service education in the DEL and DET appear to be:

(i) Individuals and target groups appear to have little or no access to systematic and long-range programs of in-service education.

(ii) The major participants in in-service education appear to have little or no voice in policy formulation.

Decision-making seems clearly to be differently allocated to the four role groups. Teachers, who are at the bottom of the hierarchical structure, appear to have a minimal part in decision making. Principals and subject advisors have relatively limited powers to influence decisions, while school inspectors have much more complete decision-making power over the other three groups. This study will investigate the degree to which teachers' perceptions of their in-service needs may vary from perceptions of other groups in the system. To the extent these differences, if any, may prove to be significant, the inclusion of teachers' voices in decision-making processes would appear to become more urgent.

The identification of the needs of those the programs are intended for should be top priority. Sharp aptly commented that in-service needs are

> . . . distinctive and appropriate intervention points . . . that must be identified to design, fund, deliver, and evaluate in-service education programs (Sharp, 1979, p. 71).

This seems to highlight the shortcomings of the trouble-shooting type of in-service education and also makes clear that in order to meet curriculum guidelines certain identified competency skills need to be improved if teachers are to be more effective.

An interesting model is the one developed in 1970 by Fuller of the University of Texas (Austin) (OECD, 1982). She provides a perspective on developmental needs of the teacher in relation to the job, and postulates the following stages:

I. Early phase	0. Concerns about self (non-teaching concerns).
II. Middle phase	1. Concerns about professional expectations and acceptance.
	2. Concerns about one's own adequacy: Subject matters and class control.
	3. Concerns about relationships with pupils.

III. Late phase	4. Concerns about pupils learning what is taught.
	5. Concerns about pupils learning what they need.
	6. Concerns about one's own (teacher's) contributions to pupil change.

What this model suggests is that a teacher enters into the work situation already having some concerns that need to be addressed, and needs that have to be met if he or she is to be a successful teacher. Once these concerns and needs are identified and prioritized, a more effective in-service program can be more readily designed and implemented, then an effective instruction of the curriculum will be better provided for.

Teachers are regularly criticized when students achieve lower than expected. One of the main reasons may be that teachers are relatively ill-qualified, possibly due to inadequate preparatory programs in the colleges of education and universities. This forces them to teach beyond the limits for which they were trained, with inevitable poor results.

Black educationists in the RSA have been calling for quality teaching in the schools and that in-servicing teachers should receive top priority. The minutes of the Transvaal United African Teachers' Association 76th conference read:

> Teachers should not stop learning after qualifying. The teacher must upgrade himself by resuming education because factors that govern education and his professional pursuits demand a further education either academically or professionally (Transvaal United African Teachers' Association, 1982, p. 2).

This can be achieved, as Peteni suggested, not only through the provision of short, crash training programs that may be acceptable in emergency situations, but must never be adopted as a substitute for carefully planned pre-service and in-service teacher training courses (Peteni, 1981).

The Association of Inspectors in the DEL submitted a memorandum to the department that was subsequently followed up by an interview at which the Director of Educational Services was present. The inspectors' delegation reiterated the urgency of in-service training and that teachers should be exposed to newly-discovered approaches in teaching. Perhaps the response by the director that

> . . . it is difficult to identify people who really need in-service (Association of Inspectors of Education in Lebowa, 1983, p. 2).

highlights, as previously stated, the shortcomings of a troubleshooting type of in-service education and puts into focus the rationale for this study.

A cooperative approach to in-service is recommended. This is because the administrators (who are principals,

subject advisors, and inspectors) have immediate contact with teachers and perhaps can express with accuracy what the needs of the teachers are, possibly not better than the teachers who are directly involved with curriculum instruction.

It is therefore also essential to tap the perceptions of these administrators as regards the in-service needs of teachers since such administrators, other than being in constant contact with teachers, are readily available as consultants. Grandgenett supports this by advising that

> In obtaining a more complete picture of in-service needs, input from a variety of sources concerned with improving instruction . . . in the school would be helpful (Grandgenett, 1978, p. 7).

Research Questions

An attempt was made to answer the following questions:

1. How do all the respondents order the teaching competencies when asked to identify the in-service needs of teachers?
2. How do teachers responding to the survey order the teaching competencies when asked to identify their own in-service needs?
3. How do principals responding to the survey order the teaching competencies when asked to identify in-service needs of teachers?
4. How do subject advisors responding to the survey order teaching competencies when asked to identify in-service needs of teachers?

5. How do inspectors responding to the survey order teaching competencies when asked to identify in-service needs of teachers?

6. How do the respondents order the teaching competencies along the seven clusters?

7. How do teachers order the seven clusters of teaching competencies when asked to identify their own in-service needs?

8. How do principals order the seven clusters of teaching competencies when asked to identify the in-service needs of teachers?

9. How do subject advisors order the seven clusters of teaching competencies when asked to identify the in-service needs of teachers?

10. How do inspectors order the seven clusters of teaching competencies when asked to identify the in-service needs of teachers?

11. What are the differences that exist in the perceptions of teachers, principals, subject advisors, and inspectors concerning teachers' in-service needs along the seven clusters?

Design of the Study

In order to find the answers to the above questions, the following steps were taken:

1. After careful review of selected literature on in-service needs assessment of teachers, it was judged that Ingersoll's Teachers' Needs Assessment Survey (TNAS) would be the primary source of data. After pilot testing was done, three items determined not to be applicable to black secondary teachers in the RSA were removed and an additional six items included. The result was a survey instrument of 46 items that were arranged randomly to avoid a response set among a sample of 300 secondary school teachers, 60 secondary school principals, 45 subject advisors, and 45 inspectors.

2. The researcher travelled to all the sampled schools to personally administer the questionnaire to groups of

selected teachers and principals. Questionnaires for subject advisors and inspectors were given to circuit inspectors to be mailed back after completion.

3. The data from the questionnaires were analyzed using the facilities of the Michigan State University computer center. On the basis of the analysis and literature review, the researcher developed a number of conclusions and made recommendations.

Hypotheses

The following were the hypotheses to be tested:

1. There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of developing pupil self (DPS) in which teachers have in-service needs.

2. There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of developing personal self (DPES) in which teachers have in-service needs.

3. There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of handling classroom problems (HCP) in which teachers have in-service needs.

4. There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of managing classroom instruction (MCI) in which teachers have in-service needs.

5. There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of evaluating and assessing achievement (EAA) in which teachers have in-service needs.

6. There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of individualizing instruction (II) in which teachers have in-service needs.

7. There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors

in regard to the cluster of planning instruction (PI) in which teachers have in-service needs.

Basic Assumptions

The following assumptions are the basis of the study:

1. Effectiveness in in-service training programs is a function of the in-service needs of teachers as perceived by them, and by principals, subject advisors, and inspectors.
2. Even though the TNAS instrument on which the questionnaire is based, was developed and validated in the United States, it can be applied meaningfully in a South African educational setting.
3. Participants responded sincerely to the TNAS.

Limitations and Delimitations

The study was conducted with the awareness of the following limitations and delimitations inherent in the design:

1. The TNAS was not validated in the RSA setting and this may constrain generalizing the results.
2. In-service needs would be reported only in terms of the competencies appearing on the questionnaire.
3. The respondents are all employed by DEL and the findings of the study will be applicable only to the extent that other populations of other departments share similarities to the groups.
4. The findings of the study will reflect only the perceptions of those who will have completed the questionnaire.
5. The competency skills appearing on the questionnaire represent selected needs rather than subject matter content.

Definition of Terms

The meaning of terms used in the study will be as defined below;

Administrator. An official, other than the teacher, appointed by the education department, vested with the powers to administrate and carry out academic and professional duties pertaining to education. He or she can be principal, subject advisor, or inspector of schools.

Apartheid. A policy of segregation and political and economic discrimination against non-white groups in the RSA.

Asiatic. A descendent of people who originated from India, Malay and other East Indies islands of South-east Asia.

ATASA. An acronym for the African Teachers' Association of South Africa.

Bantu Education. A separate education for blacks enacted with the Bantu Education Act of 1953 by the Nationalist Party Government to serve the wider aims of the apartheid doctrine.

Black. A person whose origin is indigenous to Africa and is of African descent.

Black areas. 13% of South Africa allocated to blacks, now officially forms Bantu homelands. It is formed of scattered reservations of varying sizes.

Circuits. An equivalent of a school district under an inspector of education. It is not autonomous and is directly under the control of the central education department.

College of Education. A teacher training institution not similar to a department of education attached to a South African university.

Colored. An official tag for a person of "mixed race."

Competency skills of Teachers. The knowledge, skills and attitudes utilized in the instruction of students.

Curriculum. The sum total of experiences, methods, procedures, people, and things which are used in changing learner behaviors (English and Kaufman, 1975, p. 64).

In-service education. That part of staff development that includes systematically designed activities planned to improve instruction and increase teachers' competencies.

Inspectors. Administrators appointed by the education department as arms of control on the circuits and also functioning as instructional supervisors.

Instruction. The systematic imparting of knowledge to others (English and English, 1958, p. 266).

Need. The lack of something which, if present, would tend to further the welfare of the organism or of the species, or to facilitate its usual behavior; or the thing, activity, or condition (internal or external) that is lacking (English and English, 1958, p. 338).

Needs Assessment. A process to examine the gap between specific goals and an existing situation (Schmeider, 1973, p. 50). It refers to formal attempts at determining what teachers need in order to facilitate their effectiveness in the instruction of the learners.

Non-white. A person who is either Asiatic, Black, or Coloured.

Perception. An event in the person or organism, primarily controlled by the excitation of sensory receptors, yet also influenced by other factors of a kind that can be shown to have originated in the life history of the organism. More precisely in this study it will mean "...the way things look to us and how we feel and think about them." (English and English, 1958, p. 21).

Principal. The administrative head and professional leader of a school unit such as high school, junior high school, or elementary school (Goodlad, 1969, p. 192). He is subordinate to the inspector of schools.

Role group. Each category of respondents in the study according to professional role. The four role groups are; (1) teachers, (2) principals, (3) subject advisors, and (4) inspectors.

Secondary School. This is a post-primary institution that can either be a junior secondary (for standards 6 through 8, i.e. grades 8 through 10), a senior secondary (for standards 9 and 10, i.e. grades 11 and 12) or, as in most cases a combination of both. More precisely it is a school for education up to a standard higher than the fifth standard but not higher than standard ten (Education and Training Act, 1979, p. 1).

Staff development. The totality of educational and personal

experiences that contribute toward an individual's being more competent and satisfied in an assigned professional role (Dale, 1982, p. 31).

Subject advisors. Teachers upgraded to operate from circuit offices to give professional guidance in subject areas of their expertise. They are "...master teachers with strong human relations skills. They function primarily in the classroom alongside the teacher, as facilitators at group meetings, and as workshop leaders" (Mai, 1976, p. 175).

Teaching. The art of assisting another to learn. It includes the providing of information and of appropriate situations, conditions, or activities designed to facilitate learning (English and English, 1958, p. 544).

TUATA. An acronym for the Transvaal United African Teachers Association, a provincial black teachers' association affiliated to the national black teachers' organization, The African Teachers' Association of South Africa. TUATA also is the name of the magazine published by this body of teachers.

White. A person who is identified as a member of the Caucasian race.

White areas. 87% of the RSA allocated for whites and includes major farms, ports, cities, most mines and factories.

Organization of the Study

This study consists of six chapters. The first chapter is the overview of the study. It gives the setting, discusses the problem with which the research is concerned, the objectives of the study, the rationale, research questions, design of the study and hypotheses, limitations and delimitations of the study, as well as defines the terms used in the study.

Chapter two gives reflections on the case for educational reform in developing countries and the Republic of South Africa. Chapter three is devoted to review of selected literature.

The fourth chapter describes the design of the study, including variables, questions and hypotheses, the population, sampling procedures, instrumentation, pilot testing the questionnaire, distribution and data collection, and how the data was processed.

Results of the study are reported in chapter five. The study is summarized in chapter six, including recommendations for improvement of in-service education in the RAS and for further research.

CHAPTER II

A CASE FOR EDUCATIONAL REFORM: SOME REFLECTIONS

Developing Countries

Introduction

Perhaps the greatest indictment that can be made against the educational systems of former colonial powers is that by the time most of their colonies gained independence, not much had been achieved regarding the level of literacy reached by the indigenous people. The colonies were little more than reservoirs of raw materials and cheap labor, exploited with the aim of improving quality of life of people of the colonial powers themselves, and also serving as criteria for prestige on the international and diplomatic scenes of power. It is thus no accident that developing countries, against the background of this legacy and current economic dependency on past colonial masters, are caught up in feverish and at times futile exercises to infuse innovations that are intended to ameliorate the standard of living of their people.

Prevailing Conditions

Practical Guide to In-service Teacher Training in Africa, a 1970 publication by UNESCO, highlights rapid development as a remarkable feature of education in African countries. It reports that there is a spectacular increase in the number of schools, class rooms, and various educational facilities. These are largely due to lack of access to many facilities during the pre-independence era. Nevertheless, there appears to be glaring irregularities and shortcomings in education which, unless something is done about them, may well retard this promising advance. We must accept that a quantitative increase in education does not always mean an increase qualitatively.

A characteristic feature of education in developing countries is possibly what used to obtain in Europe in the past centuries. A point to be made is that educational practices which colonial powers exported featured greater degrees of student dependency than the practices employed by colonial powers at home. In most developing countries experiential learning and particularly discovery learning are rare phenomena. Learning is mostly by rote and is highly dependent on prescribed textbooks. This makes effective in-service training of teachers all the more necessary if the teachers are to catch up with modern trends.

UNESCO admonishes in the 1970 Practical Guide that a cumbersome, inefficient and costly educational system, with unsuitable curricula and methods, uncertain as to its own aims and in the hands of teachers who are in most cases insufficiently trained, cannot turn out the men and women African countries need to achieve national unity and build up their economic structures. There is thus a strong need to attend to curriculum relevance and instructional strategies.

Valle (1982, p. 1) cites the 1980 World Bank Education Sector Policy regarding the following problems that affect educational development in developing countries:

- Large numbers of persons still lack basic education; this fact is expressed by the high rate of illiteracy in most developing countries.
- The educational systems have deficiencies expressed in the fact that many children drop-out before they complete elementary school; repeaters occupy high percentages of school places; academic achievement is low.
- There is a grave form of "external inefficiency"; with most students receiving their high school diplomas not finding appropriate jobs. This fact is determined by social, economic, and political factors.
- The means, the infrastructure, and the capacity to analyze and conduct research in education are inadequate.
- The resources are increasingly scarce. Inflation erodes budgets in education and the arms race uses funds that otherwise would be for education, within the already diminished public budgets.

To obviate some of these problems, the developing countries are trying hard to catch up with the developed

countries in technology, and the accompanying committment towards the improvement of the quality of life. The general aims are, therefore, (i) incorporating newer information technologies in curriculum innovation, (ii) addressing contemporary educational issues and future trends, (iii) developing vocational and career education, and (iv) expanding opportunities to pursue learning as a lifelong activity.

On In-service Education

As far as in-service training in developing countries is concerned, Al-Ghamdi (1982) pointed out that the mainsprings of in-service training in developing countries are substantially different from those in Europe and North America.

Not downplaying the role of other professional groups, teachers are the most visible to the community and do maintain the closest contact with students. It is in this capacity that they have the greatest responsibility for what students learn in the classroom situation. It is in recognition of this fact that teachers are not expected to teach with the same proficiency they had when entering the teaching field, using outdated methods. Mohr advises;

> The need for a radical change in education must be capitalized on so that it becomes an integral part of educational structure. There is a need to meet the functional needs

> of society and individual students. Because of poor planning and lack of criteria, change has too frequently been short-lived (Mohr, 1971, p. 3).

One of the difficulties encountered by developing countries in the field of in-service teacher training is the problem relating to training enough personnel with sufficient qualifications to meet the growing demands for education. Some of the sources of growing demands in education lie in factors like increase in student enrollment, lessons of curriculum reform and education innovation, and limits of preservice preparation.

The report of findings on the status of in-service teacher education and on-going innovative programs in the Philippines by the Asian Programme of Educational Innovation for Development (1982, p. 88), perhaps best highlights the shortcomings in developing countries

- Failure to relate governance, substance delivery and modes in the programme
- A need for a rethinking of in-service teacher education especially in terms of planning, teacher involvement, and monitoring and evaluation
- Need for increased participation of teachers in discussions about programmes for their in-service
- Lack of strong collaboration and identification of the party(ies) responsible for the total in-service programme
- Failure to consider and utilize research findings on adult learning in designing training programmes for experienced teachers
- In-service programmes being held in places removed from where the teachers teach; a feature which contributes to inconvenience and irrelevance of training

- Need for more intensive surveys of training needs and their utilization in the design and training; and
- Lack of valid and reliable evaluation materials.

A salient feature from the above findings is that the recognition of needs and interests of teachers appears to be essential. The simple prescription is to treat the teacher as a professional and competent person whose contributions to successful planning of in-service programs should be seen as most valuable by decision-making bodies. Surveys by the Carnergie Foundation for the Advancement of Teaching (1983) reveal that teachers are deeply troubled, not only about salaries, but especially about loss of status, the bureaucratic pressures, a negative public image, and lack of recognition and rewards. Further,

> To talk about recruiting better students into teaching without first examining the current circumstances that discourage teachers is simply a diversion. The push for excellence in education must begin by confronting those conditions that drive good teachers from the classroom in the first place (Michigan Education Association, 1983, p. 10).

As alluded to previously, unlike in highly developed countries, some of the developing countries are still plagued by certain inhibitory factors. Writing from the University of the West Indies on in-service education in the Eastern Caribbean, Goodridge (1979) mentioned, inter alia, the following points;

- In-service education falls far short of being a high priority.
- There is a greater growth rate of population. This means the qualitative expansion of schools creates teacher supply demands which outstrip the annual supply of trained teachers.
- Teachers in general receive low salaries and the profession is not held in high esteem.

A factor that can be added to these is that in-service training sometimes takes the place of preservice training, the main objective being

> . . . to remedy and repair omissions and weakness of collegiate preparation (Lee, 1979, p. 84).

The message is that retraining might not be necessary if the original training were done properly in the first place.

Since global interdependence is a feature of modern times, developing countries are faced with scientific and technological forces that make quality in-service imperative. Johnson identifies three forces that need priority attention in the 1980s, namely (i) the knowledge explosion. This calls for a different approach to learning and teaching in schools. (ii) Instructional technology in areas like nuclear medicine, telecommunication satellites etc. The focus is to work at current teaching aids as against old ones. (iii) Television. On this he advises

> Co-opting television takes some know-how which many teachers either have little of or lack altogether. Here again, in-service education offers a corrective (Johnson, 1980, p. 23).

An expanded argument for educational change and reasons for in-service teacher training were given by Valle as guidelines to Latin American and Caribbean countries:

- The development of new knowledge in psychological and pedagogical topics requires teachers to update their knowledge and skills in order to avoid obsolescence.
- Scientific and technological developments provide new teaching material which teachers need to learn.
- The new segments of the population entering school and those already in the system are developing new anxieties which demand educators to review their teaching methods.
- New methods and equipment are entering teaching practice, especially influenced by technology, therefore requiring teachers to acquire new skills.
- Teachers are expected to be social change agents. To do so they need to become involved in continuous professional self-development, with a sense of committment to the needs of the specific society within which they operate.
- Educational objectives and goals change in virtue of changes in the social or political environment. This fact creates training needs (Valle, 1982, pp. 2-3).

Some suggestions to try to make in-service education programs more relevant and more productive in developing countries are, according to Goodridge (1979):

- The need to develop national in-service teacher education programs which are better co-ordinated, conceptualized on a long term development basis, and comprehensive in

scope; and which focus on evolving more effective strategies for attacking weaknesses and deficiencies in our educational system or stimulating further development.

- The need for the necessary financial and administrative support for national in-service programs.

- The development of a cadre of persons, with the skills and techniques necessary for teaching adults; capable of planning, implementing and evaluating the effectiveness of in-service training, of accurately assessing and more adequately responding to the needs of teachers, principals, and other supervisory staff of a wide range of insights, training and experience.

One of the main flaws in how in-service or continuing education of teachers is run in developing countries is that only inspectors and other senior education personnel claim to know what the teachers in-service needs are, and they alone know what is best for the teacher. According to OECD (1982), not only must teachers be actively involved in planning in-service activities, but various other organizations and institutions need to collaborate in the effort:

(i) Teacher-training colleges can help in program planning, holding courses, conferences, workshops, seminars, etc.

(ii) Universities can provide staff in special subjects, carry research and evaluation programs. There is just no place for universities that are 'un-touchables' and very elitist.

(iii) Secondary schools could provide in-service for the primary teachers.

(iv) Teachers organizations, since they have much influence in teaching circles, could associate closely with the training of teachers.

(v) Other governmental departments and non-governmental bodies can make their services available towards quality education.

Republic of South Africa

Introduction

The most current Government publication on the education of the black child in South Africa opens thus

> The education of the Black child in the RSA has been entrusted to the Department of Education and Training -- a country wide organization with a head office, regional and circuit offices and schools (Department of Education and Training, 1983, p. 1).

In justification of the existing structure the document espouses (p. 4)

> It may be asked why South Africa has different educational systems. The briefest reply is perhaps that this is so because we have different nations with different cultures.
>
> The educational laws of the Republic of South Africa acknowledge the existence of different nations in the country, each with its own language and culture, and with the unalienable right, through the preservation of its language and culture, to maintain its identity and to allow its own unique culture to develop in a modern society.

These are very fair words indeed. It is left to the reader to reflect on why there are no other fragmented educational systems for the so many white 'nations' in the RSA to live up to the above noble maxim. Further, it will be very difficult for the reader to comprehend the educational structure in the RSA unless this is done

against the background of conditions and attitudes that are not immediately educational. All apsects of people's lives are centered around the fundamental ideology of apartheid. It is the Government that determines what type of education is suitable for different racial groups.

Ideological Constraints

According to the S.A.I.R.R. (1983), the entire population of South Africa is 28,783,510. Of this, 20,862,510 are Black, 4,500,000 are White, 2,600,000 are Colored, and 821,000 are Asiatic. It is along these four racial groupings that education is structured.

It is Paulo Freire in the 1971 classic 'Pedagogy of the Oppressed' who argues that education is undoubtedly one of the most powerful factors to foster modern attitudes. Prosperous and complex civilizations are based on the type of education available to citizens, but at the same time it may serve as an organization for control by the powerful over the ordinary. As a crucial means to a desired form of modernization, Freire further argues that it can be a tool for individual liberalization or else may be used for continued exploitation.

The Nationalist Party rule in the RSA started in 1948 and since then it has been a regime for the enforcement of a rigid segregation which

> . . . determines the life prospects of each racial group from the cradle to the grave. A person's race classification determines his or her place of residence --- even the standards of the social services ——— including education (Troup, 1976, p. 6).

It is perhaps in the field of education where the segregation policy is most clear. In 1954 a former Prime Minister (Verwoerd) declared in a Senate speech:

> Native education should be based on the principles of trusteeship, non-equality and segregation; its aim should be to inculcate the White man's view of life, especially that of the Boer nation, which is the senior trustee . . . (Troup, p. 20).

Earlier Verwoerd had enunciated the new Government policy for black education thus:

> My department's policy is that education should stand with both feet in the reserves and have its roots in the spirit and being of Bantu society. The Bantu education must be able to give itself complete expression and there it will be called upon to perform its real service . . . There is no place for him in the European community above the level of certain forms of labour (Troup, p. 4).

Full equality in education cannot be realizable while major inequalities continue to pervade the South African society. Financially, to run so many departments of education is not cost effective, resulting in the glaring disproportions of per capita expenditures across the four racial groups. Chrichton (1980) observed in his M.Ed dissertation that the inadequacies of South Africa's educational

policies are in essence, in insufficient allocation of resources and the continued committment to racially separate educational systems and facilities. Separate systems result in higher administrative costs and wastage.

Blacks have always resisted the implementation of Bantu Education since its inception in the early 50s. There have been teachers' resignations and riots which became more pronounced beginning with the mid 70s, taking new directions and tragic dimensions, which may be ascribed to alienation with the whole system that breeds frustration and discontent. The following are just a few of the many issues that highlight the need for educational change;

- Lack of free and compulsory education.
- Lack of one national education department for all.
- Unequal expenditure across all racial groups.
- Inequality in teacher-pupil ratio across all racial groups.
- Disparities in salaries for white and black teachers.
- Lack of improved teacher training colleges for black teachers to combat the qualitative decline in standards.
- Books which reflect positively only white culture and achievements, contain biased content, and perpertuate misconceptions and stereotypes. To this Mphahlele had this to say:

> The differences in culture are acknowledged but the misuse of education "to destroy Black image" is abhorred (Mphahlele, 1981, p. 2).

- Lack of needed curriculum innovation -- that not much attention has been given to mathematics and science, therefore making blacks remain in a position of inferiority.

This is moreso because mathematics became compulsory for primary and secondary children only in the early 70s.

On In-Service Education

Most of the current crop of teachers are products of nearly four decades of segregated education, with poor qualifications, and reflecting

> . . . not only the general inadequacies of Bantu Education but also the poor facilities for training African teachers (Troup, p. 40).

It is no surprise that the number of professionally qualified teachers with low academic qualifications is still one of the most serious problems in black education today. Troup (p. 14) reported that of the 57,433 African teachers in March of 1973, University degrees were held by only 1.69%. Those with matriculation or equivalent formed 11% of the total, and those with Junior Certificates or equivalent plus a professional qualification formed 46.25%.

Black graduate teachers in subjects like mathematics, sciences and commercial subjects, because of high disparities in salaries as compared to their white counterparts, resigned in favor of the private sector. Teachers become overworked and schools understaffed because of this continuing exodus from the profession. The salary discrepancies are a reverbaration of Verwoerd's 1954 speech in the Senate that

> The salaries which European teachers enjoy are in no way a fit or permissible criterion for the salaries of Bantu teachers. The European teacher is in the service of the European Community and his salary is determined in comparison with the income of the average parent whose children he teaches . . . in precisely the same way the Bantu teacher serves the Bantu community and his salary must be fixed accordingly (Troup, p. 41).

The outbreak of World War II brought an economic boom to the economy of the country such that skilled and semiskilled black labor became a must to sustain the economy. The 'winds of change' that saw African countries gaining their freedom in the 60s ushered in an era when blacks started forcefully to articulate the frustrations of their lot. There were strong demands to infuse material and financial support towards the improvement of black education.

Prior to 1970 in-service training was done on an ad hoc manner in forms of refresher courses and vacation courses. It was realized that

> . . . a purposeful and effective system of in-service instruction is imperative for the retraining and upgrading of teachers working at a level beyond their original academic or professional qualifications (Van Rensburg, 1975, p. 42).

This was particularly so for secondary schools, especially after 1968, when the department introduced new syllabuses and recommended new methods in languages, sciences

and mathematics. Specialists were appointed to conduct courses around the country. For a country the size of South Africa, practical problems necessitated setting up a permanent central In-service Training Centre at Mamelodi (Pretoria) completed in 1970. The center was mainly for secondary teachers and only about 200 teachers from all over the country would attend for a week or two. Inspectors would attend and were expected to conduct further training of primary teachers in their circuits.

On the demerit side, one can well imagine the travelling costs per annum for all teachers who went to the center -- all at Government costs. Lack of suitable qualifications rendered the criteria for the nomination of trainees very questionable.

Presently there are indications of moves towards decentralization, with known centers in homeland departments of Bophuthatswana, Ciskei, and Kwazulu, along the lines of the Mamelodi center. Most of these centers concentrate on primary school teachers though. Some of the criticism of in-services voiced by Johnson (1980), may be extrapolated to the state of in-service education in the DET;

- In-service education has not addressed teachers' urgent, day-to-day needs. Teacher needs too often go unassessed, and teachers are seldom involved in deciding what they will study.

- In-service education has been required of teachers and imposed and delivered by others.

- In-service education has violated many principles of good teaching, for example, programs being sporadic and disorganized.
- In-service education without integrated activities developed upon assessed priority needs.

On the above Johnson cites Rubin (1976) that

> Teachers are more likely to benefit from inservice programs in which they can choose goals and activities for themselves, as contrasted with programs in which the goals and activities are preplanned (Johnson, 1980, p. 31).

Outside the DET organization there are attempts by the private sector to help alleviate the situation. There is, for example, FUNDA. It is a project of the Urban Foundation, private companies and individuals aiming at providing services mainly for the communities of Soweto (in Johannesburg), focusing on the teaching of teachers. Two of the services proposed are (TUATA, 1984):

- In-service training for teachers at all levels and in a wide range of subject directions in order to improve the qualifications and effectiveness of teachers.
- A Teachers' Center in which the professional status of teachers will be promoted by encouraging interaction, communication and the sharing of common problems and experiences.

The reasons why FUNDA was initiated are that (i) it was found there are serious gaps in the availability of any real community-based and multi-purpose institutions; especially those geared to meeting the needs of teachers,

trainers and educators, and (ii) that there is a need to transfer the development of people into the hands of the people themselves in order to ensure that real needs are identified and appropriately provided for.

This is a pointer to what the public view as flaws in what DET provides for the black teacher. The black teachers' organization of the country, ATASA, has constantly articulated the frustrations of the black teacher as far as in-service education is concerned. In a memorandum submitted to the Director-General of DET, ATASA argued:

> We are seriously concerned about some of the effects of various in-service courses organized by inspectors and the Department because some teachers attending these spend more time outside the classroom than inside, thus causing pupils to be left untaught for substantial periods of time (ATASA, 1983, p. 6).

In the same vein ATASA recommended that in-service training of teachers be predominantly school-based so as to minimize the practice of removing teachers from their pupils. Its argument is that it is cheaper and less disruptive to detach one competent person from his or her normal duties for a limited period for successively conducting courses in various places than it is to disrupt many schools by requiring many teachers to attend courses far away from their schools.

When ATASA requested that in-service courses be conducted by subject advisors locally in order to avoid the

disruption caused by long periods of absence by teachers, the DET Director-General pointed out

> In-service training is primarily the job of the departmental head --- some degree of disruption is of necessity if higher standards of teaching are to be attained (TUATA, 1984, p. 9).

It could be expected that most of the departmental heads are not suitably qualified though it is essential that they be fully informed about the content and methodology concerning their fields of subjects, about latest approaches, techniques, evaluation methods and aids; and they must be able to convey their knowledge effectively to the teachers concerned.

According to DET, the most important task of the departmental head is

> . . . to ensure that the quality of teaching in the classroom is of the highest possible standard (DET, 1983, p. 23).

The departmental head must give guidance to teachers in the following, among others: syllabuses, work programs, preparation, practical work, aids, marking, evaluation, follow-up and remedial work, quality and quantity of written work, tempo and standard of tests, quality of pupils' work, control and evaluation of written work by the teachers.

It is very apparent that the role of the teacher in planning in-service activities is de-emphasized. The

researcher finds it astonishing that DET speaks of meaningful planning of in-service training to be preceded by a determination of needs which should be based upon

> . . . a close scrutiny and study of statistics relating to the circuit . . . and to every school (DET, 1983, p. 14),

while nothing is said of the real needs of teachers, especially as perceived by them.

In the determination of in-service needs for teachers, DET puts great emphasis on results of pupils obtained in external examinations, previous averages and symbols for individual subjects, teachers' experience, qualifications, subjects each teacher is competent to teach, etc.,

> . . . so that the degree of correlation between the qualifications of a teacher and the scholastic achievement of his pupils may be determined (DET, 1983, p. 15).

There is thus a gross oversight of assessing needs perceptions of teachers, whose instructional shortcomings are the main contributory factors to the popularized 'weak results.' It is a violation of good principles of effective in-service activities for central administrators solely to make system wide determinations of what the in-service needs of teachers are.

Summary

The foregoing exposition indicates that most developing countries, especially in the post-colonial period, have been experiencing massive increases in the number of schools, classrooms and various educational facilities from which most of their people were shut out during colonial times. Some of the educational practices are outdated as compared to advanced countries, with characteristic features of high illiteracy, high drop-out rate, lack of job opportunities, lack of resources, and inadequate research capacity.

The information explosion and a striving to address current educational issues act as impetuses to the pursuit of learning as a lifelong activity. One of the problems is the training of enough personnel to meet the growing demands. Lack of teacher involvement renders in-service education activities ineffectual, compounded by the fact that there are general weaknesses in collegiate preparation. To redress the situation, collaborative efforts are suggested whereby teacher-training colleges, local universities, primary and secondary schools, teacher organizations, government bodies and the private sector can contribute towards the improvement of education.

The South African system of education is divided along racial group lines based on the fundamental logic

of the apartheid doctrine. It has generated lots of frustrations and grievances, such as a national call for wider curriculum reforms and improvement. Organized forms of in-service education for the black teachers were started in the late 60s, but they still fall short of directly involving teachers to participate in the planning of in-service education activities in terms of tapping their instructional needs.

A review of selected literature on in-service education follows in the next chapter.

CHAPTER III

REVIEW OF SELECTED LITERATURE

Introduction

This chapter reviews selected literature on in-service education. It presents the state of the art in in-service education, definition and goals, patterns and delivery systems of in-service education, teacher involvement and guiding principles, competency skills in curriculum instruction, and an overview of needs assessment.

State of the Art in In-service Education

There appears to be a plethora of materials on in-service education. Edelfelt (1975) reviewed ERIC entries of 1973 and 1974 which revealed 256 entries on in-service education and that the topic itself is called by several names like staff development, professional development, continuing education, retraining, graduate study, and personnel development. He observed:

> Obviously there is a multitude of concerns being treated in in-service education programs . . . on the other hand the reports reflect disarray, a hodgepodge (Edelfelt, 1975, p. 1).

Also doing ERIC computer search in May 1980, Orlich (1983) identified 9,183 published and unpublished papers, studies, and articles, and that between 1976 and September 1981 6,151 articles alone appeared about related topics of in-service teacher education, staff development or staff improvement. There is thus lots of material to sift through, though much of it is nonempirical and nongeneralizable.

The traditional types of in-service training programs, typical in many countries, emphasize the deficit point of view as against the growth point of view of in-service education. The defect point of view is probably a wrong perspective of in-service education in the notions of repair and remediation. It is the one beginning with the assumption that

> . . . something is wrong with the way practicing teachers now operate and the purpose of in-service is to set them straight --- to repair their deficit, so to speak (Jackson, 1971, p. 21).

This reduction of teachers' choice usually begins with a judgment of weakness diagnosed by an outsider who proceeds to suggest a remedy for correcting that weakness.

In contrast, there is the growth point of view which assumes that teaching is

> . . . a complex and multifacted activity about which there is more to know than can ever be known by any one person (Jackson, p. 26).

The growth point of view does not aim at repairing personal inadequacy but for a teacher to seek fulfillment as a practitioner of the art. From this perspective, therefore, the central goals of in-service training are to help the teacher become progressively more sensitive to what is happening in his classroom and to support his efforts to improve on what he is doing.

The traditional approaches, according to Thompson (1983), were designed to meet the emergency situation of the moment and geared to personal rather than to system needs. The fact that instantaneous solutions were designed for complex problems as against the implications of the dynamics of a growth point of view, might have prompted these observations

> •The substance of in-service programs has not always reflected the true concerns of teachers;
> •Retraining activities have been excessively short-term, lacking adequate follow-up and reinforcement; and
> •The evaluations of the activities have relied predominantly upon opinion, with little attention to tangible evidence of teacher growth, pupil achievement, and undesirable side effects (Thurber, 1978, pp. 262-263).

Movement from the above tendencies is evidenced by trends which show in-service education seen as complementary and extending professional growth rather than eradicating deficits (Cruickshank, 1979, p. 27). The trends are

- There has been a progression from a discrete to a continuous view of in-service teacher education.
- A shift from a relatively simple to a complex in-service education.
- The trend has been from a narrow control of in-service education programs by school administrators to collaborative governance.

The role of in-service education in changing teachers' attitudes, knowledge and skills has long been recognized by many countries and international agencies. Recommendation #69 of UNESCO International Conference on Education held in Geneva 1975 made the concept of the in-service education of teachers in various countries to become part of broader educational policy and research. More attention is being paid to the professionalization of the teacher and to the connection between in-service education and innovative efforts within the education system. These efforts are mostly emphasized at different times according to the development priorities of each region.

Fundamentally, in-service education is important in any educational system because of demands for curriculum changes that are integral to any dynamic culture. What was considered by Hass (1957) about three decades ago seem still to be pertinent. Some of the factors were:

- Preservice education cannot adequately prepare members of the public school professional staff for their responsibilities.
- Increase in pupil enrollment.

- The present and continuing increase in the number of teachers.
- The present and continuing shortage of adequately prepared teachers.
- The present and continuing need for improved school leaders.

Harris and Bessent (1969, pp. 3-4) gave the following reasons to show the importance of in-service education:

- Preservice preparation of professional staff members is rarely ideal and may be primarily an introduction to professional preparation rather than professional preparation as such.
- Social and educational change makes current professional practices obsolete or relatively ineffective in a very short period of time.
- Coordination and articulation of instructional practices require changes in people.

Definitions and Goals

Definitions

Perhaps Robert Evans and his colleagues (1978), were right that a single definition of in-service education is not a reality. There is just no one agreed-upon definition because the term has various interpretations. Compounding is the fact that it is used interchangeably with staff development and other related topics.

Whatever term is used, the definition by Luke (1980) appears to be all-embracing in terms of locus and time frame. According to him in-service education refers to learning

that takes place after formal teacher preparation; it can also be interpreted to mean 'learning-on-the-job' or 'learning-while-earning'; it can take place in a teacher center, in a school, in the classroom, or at a location away from the school.

Striking commonalities in the definitions of in-service education are the emphases on the improvement of teacher competence and performance, with the aim being the over-all instructional growth of the teacher in held or assigned positions (Harris and Bessent, 1969, p. 2; Shearron, 1974, p. 112; Joyce, 1976, p. 4; Zigarmi, 1977, p. 545; Lansing School District, 1979, p. 5; Harris, 1980, p. 21; Texas Education Agency, 1982, p. 2).

This writer subscribes to the contentions by Dale (1982) and Rogus (1983) that in-service education is not synonymous with staff development but an important sub-dimension of it. Rogus argues that staff development activities have personal role and institutional dimensions, e.g. involvement of staff in program planning, consultation with peers and in-service participation. According to him 'in-service' is a subset of the umbrella concept of staff development. Therefore in-service education is

> . . . one or a series of planned instructional programs made available to a specified group(s) of professional staff members for purposes of promoting participant growth and increased job competence (Rugus, 1983, p. 9).

This is not much different from the meaning of staff development as

> . . . the sum of all planned activities designed for the purpose of improving, expanding and renewing the skills, knowledge and abilities of participants (Hendee, 1976, p. 163).

A more extensive definition is given in the Eighty-second Yearbook of the National Society for the Study of Education, wherein staff development is viewed as

> . . . any systematic attempt to alter the professional practices, beliefs, and understandings of school persons toward an articulated end . . . it involves all of those persons who make up the organizational entity called the school. This includes administrators, supervisors, teachers, support personnel, and any others who work toward the accomplishment of the mission of the schools they serve (Griffin, 1983, p. 2).

Goals

The aim of in-service education, or any staff development activity for that matter, should be to focus squarely on skill development, assisting teachers to become more capable and flexible professionals. In most countries there is the implied focus on the elimination of deficiencies due to inadequate preservice training. Because of societal pressures that impinge on schools and the public dissatisfaction with the achievement of many pupils, there is a

general increased emphasis on staff development activities world wide.

There are divergent answers as regards what the purpose of in-service education should be. In 1976 Nicholson and his colleagues undertook a concepts project and put together purposes gleaned from reports on in-service education by various authorities. They are

1. to contribute to improvement on the job (Hass)
2. to promote professional growth and development (NEA Research Division)
3. improvement of professional staff members (Harris and Bessent)
4. instructional improvement of professional staff members (Harris and Bessent)
5. to increase the competencies --- knowledge, skills, and attitudes --- needed --- in the performance of --- assigned responsibilities (Orrange and Van Ryn)
6. special preparation needed by virtue of being assigned to a situation (Howsam)
7. development of knowledge and skills which were not available at the time of pre-service preparation (Howsam)
8. to extend --- personal education (James Report)
9. to develop --- professional competence (James Report)
10. to improve --- understanding of educational principles and techniques (James Report) (Nicholson et al, 1976, pp. 86-87).

Though addressing itself to medical personnel (specifically nursing), Froberg's suggested objectives of in-service education (1971), can be easily extrapolated to the teaching situation:

1. Improve the knowledge and skills of personnel, giving them greater competence and insight into their jobs.

2. Provide incentives and stimulation for the exercise and expression of initiative and partnership in the development and contribution of new ideas and methods for effective patient cure.

3. Assist personnel to become more effective as health care providers by recognizing their individual needs and using these as a basis for further study.

4. Facilitate the learning development of personnel by providing an environment conducive to learning and by providing satisfying learning experiences.

5. Assist personnel to become more competent as health care providers in order to improve the quality of care given to patients.

Other literature reviewed (Asher, 1967, p. 7; Thorne, 1967, p. 5; Shearron, 1974, p. 113; Furey, 1978, p. 197; Palmer, 1978, p. 215; Dale, 1982, p. 31; Hall, 1983, p. 17), reflect these five basic goals of in-service education:

- The increase of quality and quantity of skills possessed by the teachers as a means of better classroom instruction. Asher (1967) argues that skill has two meanings. First one can do something after training which one could not do before training and, secondly a behavior pattern existed before training, but the learning activity was designed to increase proficiency.

- Information giving. This can include efforts to increase and upgrade content knowledge in the teacher's area of specialty i.e. expanding subject matter knowledge so that teachers can be well informed on new developments.

- Attitude change. Attitudes can stem from cultural, social, political and economic changes that have impact on education. In-service education, therefore, helps change attitude through the provision of meaningful experiences.

- Planning and organizing instruction. There are newer responsibilities for instruction expected of teachers; applications of technology to education, research findings on presentation of subject matter, instruction in alcohol, sex, narcotics, and drugs.

- Communication and interpersonal relations. Increased and communication skills, according to Palmer (1978), help achieve a sense of unity of purpose within the school system, and enhance the position of the school in the eyes of the community.

Perhaps Kaufman and English best sum up the aims of staff development programs by concluding that they help

> . . . to add to or to upgrade the existing array of skills, knowledge or attitudes of levels of staff to increase repertoires to solve previously unsolved problems or emerging problems (Kaufman and English, 1979, p. 313).

Patterns and Delivery Systems of In-service Education

Patterns

According to Berge (1957) and Asher's research findings from a study of the 314 school systems in the U.S. (1967), in-service programs could be grouped under three headings; the centralized approach, the decentralized approach, and the centrally co-ordinated approach.

The centralized approach is based on the conviction that

> . . . curriculum development should be initiated, managed, frequently conducted by persons in the central office of school system (Berge, 1957, p. 198).

The following summarized disadvantages of the centralized approach are given by Berge:

- It dampens individual motivation which is an important factor in the learning process. Motivation is usually enhanced when people select their own problems and ways of working on them.

- It contradicts the principle that individuals are likely to change when they work on problems that are significant to them and having a say in ways in which they are to work.

- In most cases it may be that problems have their origin in the administration and teachers are expected to find some solution. This type of set-up underscores a serious de-emphasis of the psychology of change.

The decentralized approach results from a conviction that curriculum improvement can best be achieved when major responsibility for it rests with the individual staff. It is Berge's argument that too much decentralization has disadvantages, some of which are:

- It may result in an individual school setting itself apart from the rest of the system and becoming encapsulated.

- Members of the building unit could lose contact with the rest of the system and become so engrossed with their own way of doing things that they no longer are much interested in what is going on outside their building.

- It is at most times difficult or impossible to secure a system-wide agreement under a completely decentralized plan.

- Unless some plan of sharing resources, both human and material, is developed, it would be difficult under extreme decentralization to provide equally rich resources to all individual buildings in a large system.

A centrally co-ordinated approach is a combination of the centralized and the decentralized approaches, with the underlying assumption that whilst the responsibility of curriculum improvement can reside in the school,

> . . . there is also a professional responsibility of the central staff for problems which cut across the total school program and for bringing some unity to the entire system (Berge, p. 198).

Here the common factor is that there is co-ordination by the central office to foster the achievement of some commonly accepted system-wide goals. A central planning committee is used to achieve the desired co-ordination effort and the functions are usually as follows (Berge, p. 203):

- Listing problems needing attention.
- Establishing an order of priority among problems.
- Selecting problems to be studied in a given year.
- Setting up the organization pattern best suited to the study of a given problem.
- Making certain recommendations as to procedures to be followed in study.
- Hearing progress reports.
- Hearing final reports and recommendations.
- Passing on recommendations or forwarding them to the final authority with recommendation for favorable consideration.

Some of the advantages of a centrally co-ordinated approach to in-service education are (i) there is co-ordination of efforts without undue central control or domination, (ii) problems studied are significant to the people involved, (iii) it gives room for constant experimentation and recurrent evaluation, and (iv) the school staff is kept informed of the progress of various working groups --- and this is a vital part of in-service education.

The last words by Berge seem to be most appropriate,

> . . . a wisely managed system of central coordination would combine the advantages existing in both the centralized and decentralized approaches and, at the same time, avoid most of the dangers that exist in each (Berge, p. 223).

Delivery Systems

The modal system of in-service education consists of five broad categories into which goals of in-service education can be summarized; namely, job-related, professional organization-related, self-directed, job-embedded, and credential-oriented. Joyce (1976) and Orlich (1983) refer to them as contextual modes. Yarger and his colleagues (1980) identified all of the five in a report of a survey of teachers, professors, and community representatives in the states of California, Georgia, and Michigan.

(i) The job-related mode includes training that is not strictly a part of the teacher's job e.g. workshops, teacher exchanges and visits, and teacher centers. (ii) With professional organization-related mode, teachers concern themselves with issues like salaries, benefits, grievance, job security, etc. (iii) The self-directed approach to in-service education assumes that

> . . . there are certain needs for professional development that the individual teacher himself can best understand and fulfill (Joyce, 1976, p. 17).

(iv) With the job-embedded mode, situations that can be provided are committee works, team-teaching, interaction with consultants, professional reading, and curriculum analysis. (v) The credential-oriented mode is thought to be perhaps the most pervasive mode toward acquiring professional credentials -- almost similar to preservice training. Literature seems to suggest that courses have little relevance to in-service education and no relation to improving teachers' classroom performance.

There does not seem to be any reliable information regarding content of in-service programs, because the type of delivery system is in accordance with the participants' needs in a particular setting. According to Yarger (1982), commissioned to write a paper on in-service education for U.S. National Commission on Excellence in Education, delivery formats include five options:

(1) Long-term programs of interrelated courses. These are related to the pursuit of advanced college degrees, designed to help teachers develop new skills with perhaps a career change in mind.

(2) Long-term courses. Teachers may enroll in these even if not for a specific program. Like the first one above, they may be related to certification or salary advancement, or geared towards the learning of new skills.

(3) Short-term courses. They usually meet only two or three times and are less likely to be attached to any kind of requirement or incentive. Teachers are involved to learn a specific skill that can be used in the classroom.

(4) Individualized support. This is a delivery format of teacher choice exercised through

> . . . provision of direct consultative services, facilitative services (matching teachers with resources, providing instructional materials), and materials and equipment for developing instructional materials (Yarger, 1982, p. 31).

(5) Self-directed learning. Teachers can subscribe to magazines, purchase books, attend lectures, think about their work, take educational trips, and form informal study groups.

The following is the summary of delivery systems gleaned from several sources (Maucker and Pendergraft, 1957; pp. 272-273; Miles, 1957, pp. 353-354; Spears, 1957, pp. 83-84; Morphet, 1959, p. 315; NEA, 1966, p. 6 and pp. 7-10; Mohr et al, 1971, pp. 6-7; Lansing School District, 1979, pp. 15-16):

(1) Classes and courses. Teachers can be involved part-time in extension courses, full-time in summer school, and in correspondence courses.

(2) Institutes. This involves a series of lectures designed to give teachers as much information as possible in a short-time.

(3) Conferences. Teacher gets chance to question others and discuss ideas presented.

(4) Workshops. Teacher often comes with a problem area in mind and may benefit from the reports of other members in the work group.

(5) Staff meetings. They help in solving problems particularly those involving curriculum and instructional procedures.

(6) Committee work. School problems that cannot be settled in staff meetings may be studied by a committee, e.g. a curriculum revision group to study new mathematics.

(7) Professional reading. This would include a professional library in each school, study groups where each teacher reads and reports, a bulletin prepared by teachers, and provision or professional books for teachers.

(8) Individual conference either between a teacher and supervisor or principal.

(9) Clinics. Experts like consultants from colleges and universities, competent staff of supervisors can supply special knowledge to principals and teachers in planning improvement and in individual teaching procedures. The clinics may also be conducted at individual schools.

(10) Visits and/or demonstrations. These afford teachers the opportunity to see techniques of instruction in actual use.

(11) Participation in the activities of professional associations as a means of developing increased competence while improving the teacher's sense of professional responsibility.

(12) Travel both at home and abroad. It is purported to give educational, recreational, and social experiences in regions or countries visited.

(13) Brown Bag lunch hour or after school sessions by teachers.

(14) In-service training provided by publishers.

(15) Television and films, tape recording, and video to view and develop programs as well as recording workshops.

(16) Surveys to gather data in instructional methodologies.

(17) Educators studying children; how they learn and how they grow and develop.

(18) Camping. As a center of activities it can enable teachers to see activities and places that might otherwise be inaccessible.

(19) Work experience. Teachers may find work experience in lines related to their teaching helpful in improving their teaching.

(20) Teacher exchanges. The teacher gets a new view of himself and his possibilities, and comes in contact with people whose background and situation in life are different from his own.

(21) Professional writing by the teacher of his experience with pupils, and also his knowledge of the subject matter area.

(22) Cultural experiences such as lectures, concerts, plays, and operas, contribute to the aim of producing effective teachers and enrichment of their lives.

(23) Community organization work that will enable the teacher to have the knowledge and understanding of local community problems.

(24) Internships to get acquainted with how the experienced go about their work.

(25) Inviting teacher-institutions and universities to take active leadership in educational conferences, research experimentation, and publications.

For the above delivery modes to be meaningful and effective it is important, as suggested by the Lansing School District and Education Association (1979), to consider the following before selection:

(i) They should relate to affective needs of children,

(ii) They should relate to cognitive needs of children,

(iii) They should enhance personal growth of teachers, and

(iv) They should encourage communication between the professional staff and parents, or between teachers and administrators.

Research studies on delivery systems show varied results.

In 1975 Schreiber studied in-service education preferences of teachers and administrators in the Province

of Alberta (Canada) and found that workshops ranked the highest as the in-service activity most preferred, and teachers' conventions least preferred. Same year Edwards, at the University of Michigan, studied teachers' perceptions of present practices and alternative delivery systems. The first eight of the eighteen alternative delivery systems preferred by teachers were professional activity leave, clinic workshops, sabbatical leave with compensation, observation or visitation leave, helping or supervisory teachers, summer work sessions, participation workshops, and selected group in-service.

In his 1977 study of teachers' preferences in and perceptions of in-service education, Zigarmi's results show the following first twelve types of in-service delivery systems in descending order of usefulness:

- Two-week summer current trends workshop sponsored by the district, colleges, and universities.
- Assistance from another teacher in your classroom.
- Workshops carried out on a college or university campus.
- Observation of teachers in other school systems.
- Observation of teachers in <u>your</u> school system.
- Special college courses conducted at your school by a college or university staff member.
- Workshop -- block of time set aside . . . for intensive study of an education problem in your school.
- Conference or workshop sponsored by professional teacher organization.
- A helpmobile.
- Reading professional education journals.
- Local faculty meeting planned by teachers and administrators specifically for in-service.

> 'Convention sponsored by teachers' organization (Zigarmi, 1977, p. 550).

Mubarak (1982) undertook a descriptive study of perceived professional benefits derived from teacher involvement in a Michigan Center and concluded

> Workshops and lectures were most frequented by respondents, were considered most helpful, and were seen as most applicable in the classroom (Mubarak, 1982, p. 130).

Teacher Involvement and Guiding Principles

Teacher Involvement

It is perhaps the most crucial aspect in planning in-service activities. This is not intended to play down collaboration, an aspect that aims at bringing parties together thus underscoring the significance of shared responsibility. According to Comras and Masterman (1972), a contemporary in-service program places responsibility on supervisors, and administrators to provide the organizational means for promoting, implementing and utilizing the ideas and contribution to be derived from a total involvement of the professional staff. Reiterating the importance of input from all involved, Furey advised

> . . . teachers . . . ought to be able to feel free to suggest ways in which administrators might develop plans for their own educational growth.

> . . . shared goal setting and decision-making reinforce the point that both teachers and administrators are educators and colleagues and not part of a worker-boss relationship (Furey, 1978, p. 196).

Ideas and suggestions of teachers are most important from the beginning in the planning of in-service activities. Bush (1971) argues that the teachers may be the most reliable judges of their own technical weaknesses and that they should have a fundamental voice in determining their in-service training programs.

In same vein Yarger asserts that classroom teachers

> . . . are probably our most important source of needs because they must interpret the needs from a variety of different sources and make sense out of them (Yarger, 1981, pp. 10-11).

He concludes that in-service plans must be directly related to what is happening in classrooms and to children, and that any in-service activity must be viewed by teachers as credible.

Once viewed as credible then such activities become effective. Zigarmi (1977) and Orlich (1983) rightly conclude that in-service programs that have the best chance of being effective are those that involve teachers in planning and managing their own professional development activities, pursuing personal and collective objectives, sharing, applying new learnings and receiving feedback.

The following paraphrased guidelines are for ensuring adequate teacher involvement and satisfaction with in-service programs, as suggested by the Texas Education Agency (1982, p. 7) and Hall et al (1983, pp. 22-28):

- The committee responsible for planning an in-service program to have adequate teacher representation.
- Teachers should not feel that the in-service program is punitive or scheduled because they are perceived to be incompetent.
- In-service programs should be models of the same high quality educational practices that teachers are expected to provide for their students.
- When, where, and for how long an in-service program is conducted is important to teachers.
- In-service programs should be designed around specified activity goals and objectives, as well as the specific instructional goals and objectives of participating teachers.
- Activities be related to priorities and programs, and based on identified needs.
- Planning to represent the appropriate involvement of schools, colleges, education service centers, and related agencies.
- The in-service program must include a positive reward system.
- Follow-up is a key factor in a successful in-service program.
- Responsibility for co-ordination to be delegated to staff personnel with both time and expertise.
- Teachers should be instrumental in determining the purpose of the in-service program, its content and staffing plan; and the nature, purpose, and use of evaluation efforts.

Research studies done on collaboration and teacher involvement show very strong agreements.

Edwards' (1975) findings indicated a desire for co-operative planning and programming by both teachers and administrators. Also Lipman's (1977) study of perceptions of school personnel in Memphis (Tennessee) highlighted that in planning programs, teachers, administrators, and instructional consultants be surveyed for ideas. Likewise Liebes' (1983) study at George Washington University pointed to the importance of expressed needs of teachers when developing in-service activities, and the collaborative effort between teachers and in-service providers.

Yarger reported results of a survey of teachers, professors, and community representatives in California, which showed agreement by the three groups that

- Inservice should be provided which directly helps teachers improve their teaching skills.
- Need for in-classroom follow-up of inservice programs that are participated in.
- Teachers need more inservice that directly addresses the special needs of children.
- Inservice should be provided which helps teachers to develop personally as well as professionally.
- Inservice decisions should be made by a collaborative governance body rather than by the local school district administration and teachers to play an important role in this (Yarger, et al, 1980, pp. 38-39).

In conclusion, the significances of teacher involvement and collaborativeness would be acknowledged if the

following elements, as suggested by the National Education Association (1966), are considered in planning a good in-service education program:

- Teachers should have an integral part in the planning and administration of the program.
- There should be opportunities for promoting teacher improvement.
- Curriculum planning is carried on cooperatively by teachers, administrators, and supervisors.
- Research and experimentation by teachers and teacher groups are encouraged.
- New teachers are well-oriented to their positions.
- There is teacher-parent-community co-operation.
- Salary practices are adequate and recognize training and experience.
- Sufficient time is available to carry on group activities without injury to the teacher's health and morale.
- The administration is fair and open-minded. Suggestions of teachers carry weight and are given careful consideration.
- All activities are carried on by administrators, supervisors, and teachers working as a team toward their fulfillment.

Guiding Principles

A staff development program becomes powerful when it is prescribed by the individual educator and responds to the assessed needs of teachers with the aims being instructional improvement and the development of pupils. Most current in-service practices still fall short of

meeting the criteria for effective in-service activities. Howey and Vaughan (1983) identify five main flaws;

- Classroom-relevant content and easily adaptable instruction strategies are too infrequently presented.
- Little continuity and coordination exists between or among staff development offerings.
- In-service activities are infrequently related to measures of changed teacher behaviors or student learning outcomes and so teachers rarely receive feedback or are aware of whether or not the in-service program has made any difference in those crucial outcome measures.
- Staff development is often presented and perceived as a way to correct a deficit rather than as a normal growth experience.

> . . . we have the situation where the teachers or other staff participants are not only under suspicion by the public as not doing their jobs adequately, but they are also often mandated to participate in an in-service program of an externally determined nature which does not adequately consider the individual's present skills or knowledge (Howey and Vaughan, 1983, p. 99).

- The in-service activity focuses solely on the teacher as the responsible party for improving instruction without sufficient attention to other organizational, social, and political factors in the school and school community.

There is much written materials on characteristics of effective in-service programs. They are not only several, but are very repetitious. From those reviewed (Thorne, 1967; Froberg, 1971; Oregon State Department of Education, 1974; Speiker, 1978; Wilson, 1978; Hutson, 1979; Leskiw, 1979; Texas Education Agency, 1982; Yarger, 1982; Burden

and Wallace, 1983; Courter and Ward, 1983; Howey and Vaughan, 1983; Orlich, 1983), the following important characteristics of quality in-service education stand out:

(1) Client involvement in the planning process; including assessment of their needs.

(2) Recognition of school needs.

(3) Focus on the improvement of instructional skills for teaching children.

(4) In-class observation, feedback, and coaching.

(5) Collaboration in organizing and planning activities to increase commitment.

(6) Long range planning to conform with educational goals.

(7) School-focused activities are more effective than other types of in-service education.

(8) In-service education policies and regulations should be broad in scope and flexible in application.

(9) In-service education should be viewed as a continuation throughout the professional careers of the preparation initiated in preservice programs.

(10) Teachers should evaluate in-service activities and receive information about program results and teacher performance throughout the year so that effective changes can be made where needed.

(11) The goal of implanting inquiry as an ongoing process in education.

(12) Provision of support elements such as time, materials, expert guidance and assistance.

(13) Incentives provided for participants to emphasize intrinsic professional rewards.

(14) In-service trainers should be competent.

(15) In-service education should follow a developmental, not a deficit model.

(16) In-service activities to lead to degrees or certification, provided such credentials are not the primary purpose of the in-service training.

(17) Sound principles of learning should be utilized in good in-service activities. They should draw upon existing learning theory and principles of psychology rather than solely upon past experience.

(18) Involvement of the building principal in the in-service program is critical for success.

Competency Skills in Curriculum Instruction

Other than specific knowledge in a particular subject, there are general teaching competency skills that should apply to every single teacher. Examples of some instructional skills necessary for all teachers are; handling of day-to-day problems of instruction, knowledge and availability of resource materials, organization and interrelationship of subject matter, various problems in dealing with complicated student relationships or classroom communication processes.

Writing a paper on in-service education for the U.S. Commission on Excellence in Education, Yarger (1982) identified characteristics that citizens would want teachers to have as (i) the ability to teach basic skills, including reading, mathematics, and communication skills, (ii) teachers who operate classrooms in schools that are neat, orderly, and run in a well-managed, almost businesslike manner, (iii) teachers who can provide specific remedial treatments

for children who are having difficulty, (iv) teachers who can perform evaluations that are publicly communicated in straight forward terms, and (v) teachers who pay attention to basic values.

The Fall 1983 MSU Alumni Magazine (p. 17) gave a synopsis of key elements that makes a master teacher:

- An excellent teacher knows the subject matter.
- An excellent teacher creates an atmosphere for learning.
- An excellent teacher knows the students and the students' view of the subject and the classroom.
- An excellent teacher demands self-improvement -- to have a burning desire to upgrade their own performance.
- An excellent teacher understands the role of a teacher -- they regularly confront themselves with questions about their educational and societal roles.
- An excellent teacher has the ability to teach cognitive skills.

On the international scene, Ministers of Education from the European Member States of UNESCO (1975), suggested that presently the teacher is supposed to

(1) be permanently imformed about the development of a number of essential branches e.g. modern mathematics,

(2) get acquainted with new fields of knowledge,

(3) cope with new educational methods based on an inter -- or multi-disciplinary approach,

(4) keep in touch with all mass communication media so that he is able to discuss various subjects with his pupils, who are very often strongly influenced by these media,

(5) know how pupils should be taught to select information and documents, as well as use them,

(6) be interested in the problems of employment and economic life as a whole,

(7) deal with the problems of vocational guidance and counseling,

(8) pay attention to the methods of education of handicapped pupils and to identify pupils' handicaps,

(9) study the methodology of adult education and thus contribute to lifelong education,

(10) understand essential world problems, and

(11) co-operate with parents and the general public.

What follows below is a summary of skills considered by Olivero (1976) as pertinent for some teachers if they are to be helped grow professionally:

- Individualized learning. To individualize learning, teachers must possess the competency to identify the entry level of given students on a specific learning continuum.
- Classroom management problems associated with individualized learning, e.g. developing diagnostic tests, establishing student learning profiles, completing mastery evaluations, and arranging learning centers.
- Learn new skills for conducting student/teacher/parent conferences.
- Learn skills for positive, interpersonal communication.
- Learn skills to motivate students.
- Learn skills for developing competency-based curricula.
- Teachers to add to their personal knowledge.

In suggesting technical guidelines for in-service teacher training for Latin American and Caribean countries,

Valle (1982) identified these topics to be considered: (i) planning of classroom activities, (ii) school administration, (iii) evaluation of student achievement, (iv) program evaluation, (v) teaching/learning methods and techniques, (vi) production of teaching materials and aids, (vii) use of audio-visual aids, (viii) organization development, (ix) community relations, (x) interpersonal relations and communications, (xi) family, community and school relations, (xii) labor relations, (xiii) teachers and government, (xiv) health and the teaching profession, and (xv) management and leisure time.

Works by Hass (1957), and Harris and Bessent (1969), highlight typical in-service education needs that are still very relevant today. They cover the following needs:

(1) Analyzing the evaluation of pupil performance.

> Evaluation is essential to progress in education. It begins with the determination of criteria and follows with description or measurement, analysis, and interpretation of data, and, finally, by the valuing of the performance or product and the representing of that value with some kind of abstract symbol (Harris and Bessent, 1969, p. 61).

(2) Increased skill in providng for the individual differences among pupils. Such differences can be due to constitutional or psychological backgrounds.

(3) Observing and analyzing instruction. According to Harris and Bessent, teachers gain insights into the teaching-learning process as they develop skill as observers and learn to view teaching in a variety of ways. Furthermore, observation is only a

beginning activity which provides the basis for analysis, discussion, or practice sessions which may lead to better teaching.

(4) Improved knowledge of teaching methods. Hass argues that

> The classroom teacher can rarely employ any teaching method or device without modifying it to fit his particular situation, the need and interests of pupils, and his own personality (Hass, 1957, p. 24).

(5) Analyzing lesson protocols. Lesson protocols mean non-verbal communication employed in classroom instruction, e.g. tone of voice, pauses, facial expressions, manipulations of materials, movements about the room, and other observable events that are not available from sound recordings.

(6) Maintenance of familiarity with new knowledge and subject matter. It is essential for members of a profession to keep abreast of the new knowledge germane to its activities.

(7) Studying communication patterns. Skills of communication in human interactions are very important aspects of instruction. In-service training may serve to broaden teachers' awareness of the effects of their behavior on others and arrays of styles to use when dealing with others. As Thorne would put it,

> It is important that teachers . . . take one or more courses in the 'art and science of living together' (Thorne, 1967, p. 9).

(8) Improved attitudes and skills involved in co-operative action research. Action research involves teachers studying their problems in order to guide, correct, and evaluate their decisions.

(9) Greater skill in utilizing community resources and in working with adults.

(10) How to learn a new job. Since new teachers rarely begin their teaching service at the peak of efficiency, it becomes inevitable to initiate in-service programs

geared to orienting the new teachers from the first day so they can immediately belong.

(11) The development and refinement of common values and goals. Teachers, and all other members of the profession for that matter, need to have a feeling of profound conviction of the worth of their work and how significant this can be to society at large. Teachers very easily lose their zest if nothing challenges them to maximize the use of their abilities. As Hass put it

> In-service education of all professional personnel is the major key to the building of a greater professionalism among teachers (Hass, p. 31).

(12) Setting instructional objectives. These are in vogue nowadays and cover fundamental aspects of teaching, namely; planning instruction, selecting instructional activities and evaluating instruction.

According to Harris and Bessent, the criteria of a well-stated objective are,

(i) the anticipated behaviors are specified,

(ii) the conditions under which anticipated behaviors are to be demonstrated are specified, and

(iii) the standard of minimum acceptable performance is specified.

Much research has been done on teaching competency skills, with varying results. Brian Cane (1969) reported on a study completed by the National Foundation for Educational Research in England and Wales, and the following topics were established as considered by teachers for inclusion in future in-service activities:

- Learning difficulties that any child might have, and methods of dealing with them.
- Pros and cons of new methods of school/class organization.
- Operation and application of new apparatus and equipment, with practice opportunities.
- Short courses on most recent findings of educational research in teachers' areas of teaching.
- Planning and developing syllabuses in detail so that content relevant to the modern child can, and be arranged in teachable units.
- Description and demonstration of methods of teaching "academic" subjects to "non-academic" children.
- Methods of dealing with large classes of varied abilities with little equipment or space.
- Practical details and aims of recently introduced schemes of work, and discussion of teaching results and demonstrations.
- Construction, marking and interpretation of schools exams and assessment tests.

Wells (1978, p. 54) identified these problem areas of teachers at various levels:

- Individualizing instruction.
- Humanizing instruction.
- Stimulating student motivation.
- Teaching of reading.
- Teaching strategies.

A study conducted by Grandgenett (1978), assessing in-service needs through perceptions of teachers, principals and education agency personnel, revealed that developing pupil self-concept seemed to be the greatest in-service need among teachers, followed by handling classroom problems,

and individualizing instruction. The least needs related to developing personal self and managing classroom instruction. In between was the need to evaluate programs and achievement, and planning instructional programs.

In March 1978 Evans presented a paper at the American Educational Research Association in Toronto (Canada) on in-service needs assessment. The findings revealed that with secondary school teachers, factors of control (wanting students to behave as I want them to behave) and invigoration (wanting to vitalize my students' interest in learning and improving their achievement) were very significant.

Studying the professional development needs of full-time teachers not pursuing advanced study, King reported the following primary needs in descending order

- Improving the efficiency and productivity of students.
- Developing pupil self.
- Detecting and treating emotional and adjustment problems.
- Individualizing instruction.
- Classroom management (King, 1978, p. 169).

In November 1981 True and Benton conducted a study to determine perceived needs of in-service education of reading teachers in Georgia School systems. The ratings were in the order

- 19 school systems identified needs of staff development programs which deal directly or indirectly with reading instruction.

- 14 school systems requested topics dealing with diagnosis and evaluation of pupil performance in reading.
- 17 school systems requested needs for topics related to classroom management, discipline, organization and planning.

The five most needed competencies for in-service education as perceived by Saudi Arabia secondary teachers in a 1982 study were

- Keeping abreast of development in your own subject matter area.
- Identifying student disabilities that need referral or special remedial work.
- Utilizing of audio-visual equipment and other mechanical aids.
- Creating useful remedial materials for slow learners.
- General presentation of information and direction (Al-Ghamdi, 1982, p. 116).

The already cited 1982 descriptive study of Mubarak on perceived professional benefits derived from teacher involvement in a development center, had some of these conclusions:

- Activities having topics dealing with personal growth and the improvement of instructional skills were the ones frequented most.
- Specific benefits of participation in teachers' center activities were related to learning from others, personal growth, and learning new teaching styles.

Still in 1982, Khoury studied the perceived effects of in-service training for teachers in Jordan on selected objectives. The perceived need in each of the six in-service areas had these mean ratings on a 5-point scale:

•Teacher motivation	2.64
•Teacher orientation	2.43
•Teachers' knowledge expansion, and improvement	2.33
•Professional growth	2.29
•Teaching effectiveness	1.92
•Class management	1.59

When principals of schools were asked to rate basic competencies for successful teachers in a study conducted by Campbell and his colleagues (1983), the three highest responses went in the order

•Ability to use discipline in appropriate ways,

•Interpersonal skills, and

•Ability to inspire the children or motivate them.

Weber and others surveyed 81 preservice and 103 in-service teachers to identify teaching competencies they perceived to be most important. The results suggested that in-service teachers viewed the following competencies as most important

•Identifies learner's emotional, social, physical, and intellectual needs.
•Maintains order in a classroom and assists students in the development of self-discipline.
•Designs instruction appropriate to goals and objectives.
•Identifies and reacts with sensitivity to the needs and feelings of self and others.

- Utilizes managerial strategies that increase appropriate student behavior and decrease inappropriate student behavior (Weber et al, 1983, p. 7).

Overview of Needs Assessment

Definition

The fact that the word "need" is used so frequently does not imply that in-service education is merely remedial. Any expressed needs help to add to an already established array of teaching strategies. This is why need assessment procedures should be continuous.

Definitions of needs assessment show commonalities of salient features, for example

> . . . the formal process for identifying outcome discrepancies (Kaufman, 1972, p. 8).
>
> A needs assessment is a procedure or process that identifies the perceived or expressed needs of a school district (New Jersey State Department of Education, 1974, p. 11).
>
> . . . a systematic procedure by which educational needs are identified and ranked in order of priority (Yuskiewicz, 1975, p. 1).
>
> The formal harvesting, collection and listing of needs, placing the needs in priority order, and selecting the needs of highest priority for action (Kaufman and English, 1979, p. 343).
>
> Needs Assessment is a large class of activities that are aimed at determining the needs that exist among a certain group of people (Spitzer, 1979, p. 4).
>
> . . . a process of identifying and defining those things or factors without which a person

> or group or school cannot adequately function (Kay, 1981, p. 28).

Most significantly is the pointer by Yuskiewicz (1975) that need assessment can be focussed on various levels of the educational system, e.g., the national level, the state level, the school building level, the program level, or the instructional level.

Purposes

Perhaps the most important principles of needs assessment in in-service education are that teachers must be involved in all the steps, and the ultimate goal be to satisfy the learning needs of students.

According to the Lansing School District and Lansing Schools Education Association (1979), the purpose of needs assessment is two-fold; first, to help identify, in a systematic process, the needs of a particular building, group or individual. Secondly, to provide important involvement of all members of the school (administrators, teachers, students and parents) in the development of meaningful in-service education.

The following are some of the major reasons for needs assessment as given by Witkins (1978):

(i) Planning. Needs assessment establishes direction and focus of basic curricular programs, sets priorities for future development, and gives the basis for allocating scarce resources.

(ii) Evaluation. Needs assessment looks to the future whilst evaluation in general looks to the past and thus may profitably be used to assess areas of discrepancy which should be addressed for the future.

(iii) Accountability. Needs assessment enables school systems to document their needs, thus providing a rationale for the way that they spend their funds.

As to why a needs assessment, the New Jersey State Department of Education (1974) gives these answers:

(i) It provides greater involvement by the community.

(ii) It can pinpoint precisely where problems lie.

(iii) It can show problems that were not tackled.

(iv) It helps

> . . . develop well-defined, verifiable education goals and clears a smoother path toward achieving those goals (p. 11).

(v) It helps develop

> . . . a data base for future educational decisions and establishing a resource bank of information . . . (p. 11).

Both Witkins (1975) and Kominski (1978) seem to be in agreement that needs assessment procedures help determine

(i) A desired or required state of affairs i.e. "what ought to be" in the area(s) to be assessed.

(ii) The present conditions that exist in that area.

(iii) Discrepancies that may exist between two states of affairs.

(iv) The reasons or causes for the discrepancies.

(v) Which discrepancy (or need) areas should be given the highest priorities for action.

Models and advantages

Some of the maxims intended to provide assistance when planning and conducting a needs assessment, as suggested by Kominski (1978) are that:

(i) Needs assessment is a continuing process that should be employed during each planning - development - implementation - evaluation - revision cycle of a program.

(ii) Prior to initiating a needs assessment activity, an educational agency should formulate clear measurable definitions of "need" and of the process by which these needs will be determined.

(iii) Educational agencies should consider determining whether it is their responsibility to meet each of the perceived needs.

(iv) The technical quality of survey instruments should be improved. This will ensure validity and reliability.

(v) "Needs" that are identified through survey questionnaires should be validated with statistical and/or test data.

(vi) More sophisticated statistical analysis methods for the measurement of needs should be considered.

There are three types of needs assessment models according to Kaufman (1972): (i) The deductive model. This starts with a predetermined list of objectives or outcomes derived from values and empirical data concerning

"What is" and "what should be". (ii) The inductive model. It starts with the partners in education, and they, individually and/or in groups, determine the values and resulting goals for education. (iii) The Classical model, which is not usually recommended, starts with some general statements of goals or intents and proceeds directly to the development of educational programs.

Needs assessment instruments can take many forms. They can be open-ended subjective responses, checklists, or even scales. They can also either be of written or oral form. The advantages for the written type (NEA, 1975) are (i) each individual teacher's responses count, (ii) responses in writing provide "hands-on" data to work from and communicate with, and (iii) the administration of the survey is usually fast.

In general, some of the advantages of needs assessment are (Witkins, 1978);

- You may find revealing discrepancies of various kinds among the perceptions of different groups e.g. parents, students, educators, and business people.
- Unexpected or hidden needs and causes of ongoing or unresolved problems may emerge.
- The assessment, if addressed to future and long-range needs as well as current ones, will provide for renewal in the schools.
- Needs assessment should also give direction for placing priorities and allocating scarce resources.
- Needs assessment will also give information for planning in special areas such as education of the handicapped,

health and guidance services, career and vocational education, etc.

This writer is inclined to agree with what English and Kaufman regard as problems that will keep plaguing an educational system if needs assessment is not done;

> •Confusion of means and ends.
> •Uncertainties over which problems are most acute.
> •Inability to defend administrative decisions regarding program activities.
> •A susceptibility to adopt new things before we really know what they are designed to do and what they will do when applied (English and Kaufman, 1975, p. 62).

Summary

The review of selected literature reveals that in-service education is of primary concern in almost all educational systems worldwide, with the differences only in the levels of sophistication or advancement. There is an abundance of literature on in-service education though much of it is non-empirical and not generalizable.

The aim of in-service education is primarily to assist the teachers to become more capable professionals in helping students learn. This makes it imperative that teachers be involved in the planning of their program activities, and that administrators plus other education personnel be involved collaboratively.

Literature indicates that the teachers' in-service needs are great and varied. This also applies to their preferences for different in-service delivery systems. However, the indication is that the integral component of a general framework within which in-service programs should be built is needs assessment.

The implications of the review of literature to this study are: (i) The centrally co-ordinated approach to in-service education, because of its utilization of a planning committee representing administrative personnel and the teachers, focuses the rationale of this study to tap the perceptions of all those involved in the instruction of the curriculum. (ii) The type of delivery systems in in-service education should be, not only according to the preferences of administrators, but also according to the choices of the teachers, that is, the delivery systems to relate to the needs of teachers. (iii) The teaching competency skills reviewed formed the basis for the modification and addition of selected competency statements to the survey instrument.

The next chapter will give the methods and procedures used in the study.

CHAPTER IV

DESIGN OF THE STUDY

Introduction

This chapter on methodology gives the variables, questions, and hypotheses; describes the target population, sampling procedures, instrumentation, pilot testing, the questionnaire, distribution and data collection; the treatment and analysis of collected data.

Variables

The professional role group as an influence in the perceptions of in-service needs of secondary school teachers is the variable of interest in this study. The independent variables are the four professional role groups; teachers, principals, subject advisors, and inspectors. The outcome variable is the perception of teachers' in-service needs as measured by selected teaching competency skills on the questionnaire.

Questions and Hypotheses

The researcher investigated eleven primary research areas concerning the perceptions of teachers' in-service needs by the four role groups:

1. How do all the respondents order the teaching competencies when asked to identify the in-service needs of teachers?
2. How do teachers responding to the survey order the teaching competencies when asked to identify their own in-service needs?
3. How do principals responding to the survey order the teaching competencies when asked to identify in-service needs of teachers?
4. How do subject advisors responding to the survey order teaching competencies when asked to identify in-service needs of teachers?
5. How do inspectors responding to the survey order teaching competencies when asked to identify in-service needs of teachers.
6. How do the respondents order the teaching competencies along the seven clusters?
7. How do teachers order the seven clusters of teaching competencies when asked to identify their own in-service needs?
8. How do principals order the seven clusters of teaching competencies when asked to identify the in-service needs of teachers?
9. How do subject advisors order the seven clusters of teaching competencies when asked to identify the in-service needs of teachers?
10. How do inspectors order the seven clusters of teaching competencies when asked to identify the in-service needs of teachers?

11. What are the differences that exist in the perceptions of teachers, principals, subject advisors, and inspectors concerning teachers' in-service needs along the seven clusters?

As a means of developing this study the following null hypotheses were used:

1. There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of developing pupil self (DPS) in which teachers have in-service needs.

2. There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of developing personal self (DPES) in which teachers have in-service needs.

3. There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of handling classroom problems (HCP) in which teachers have in-service needs.

4. There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of managing classroom instruction (MCI) in which teachers have in-service needs.

5. There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of evaluating and assessing achievement (EAA) in which teachers have in-service needs.

6. There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of individualizing instruction (II) in which teachers have in-service needs.

7. There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of planning instruction (PI) in which teachers have in-service needs.

Population

The target population for this study consisted of black secondary school teachers, secondary school principals, subject advisors, and inspectors of the DEL in the RSA.

According to the 1984 statistics of the department (see Table 4.1), the secondary school system has 332 schools that have an enrollment of 144,487 pupils. These schools are served by 4,632 teachers, 1,211 of whom are not professionally trained and are therefore unqualified. All the schools have principals, making a compliment of 332 principals.

Subject advisors, who were formerly teachers and have been upgraded to advise teachers in subjects of their expertise, are 45 in number.

45 inspectors, who have both administrative and instructional supervisory functions, serve all the principals and teachers in the educational department.

The table following shows how the target population is distributed according to the fifteen circuits.

Sampling Procedures

The survey utilized a cross-sectional design. The aim was to describe and compare perceptions of teachers, principals, subject advisors, and school inspectors regarding

TABLE 4.1 TARGET POPULATION

	Circuit	Inspectors of Education and of Schools	Subject Advisors	Principals/ Secondary Schools	Qualified Teachers	Unqualified Teachers	Pupils
1	BAKENBERG	3	3	24	199	109	9868
2	BOCHUM	3	3	21	138	56	6147
3	BOHLABELA	3	3	36	187	119	9903
4	BOLOBEDU	3	3	16	133	80	6741
5	DENNILTON	3	3	21	148	77	6844
6	KONEKWENA	3	3	28	266	64	9911
7	MAHWELERENG	3	3	30	368	115	15427
8	MANKWENG	3	3	24	457	52	15119
9	MAPULANENG	3	3	14	166	160	9611
10	MOGODUMO	3	3	20	275	46	9392
11	NEBO	3	3	26	211	112	10074
12	POLOKWANE	3	3	18	328	17	10804
13	RAMOKGOPA	3	3	14	140	62	6141
14	SEKHUKHUNE	3	3	24	214	82	10034
15	THABINA	3	3	16	191	60	8471
	TOTALS	45	45	332	3421	1211	144487

SOURCE: SUPPLIED BY OFFICE OF THE SECRETARY 01-May-1984

the in-service needs of teachers at a single time point. Further, the cross-sectional design fitted the time limits within which the investigation was to be carried out.

The researcher employed a combination of stratified random sampling, simple random sampling, and cluster sampling techniques. It was hypothesized that the perceptions of in-service needs of teachers by the different role groups would not vary.

The stratifying variables (the four professional educator groups) may be directly related to the outcome variable, perception of teacher in-service needs. The partitioning of the population was thus designed to increase precision and guarantee representation of the elements of interest, the four role groups.

Disproportionate sampling became necessary because of the extreme imbalance in the sampling unit; 3,421 teachers, 332 principals, 45 subject advisors, and 45 inspectors.

Each circuit served as a cluster from which 20 teachers and 4 principals were randomly selected. The remaining two strata; subject advisors and inspectors, were oversampled by taking their entire populations.

Breakdown:

Teachers	300
Principals	60
Subject Advisors	45
Inspectors	45
TOTAL	450

Instrumentation

The reasons the researcher chose the questionnaire method are, according to Selting and his colleagues:

> The questionnaire is likely to be a less expensive procedure than the interview. It requires much less skill to administer them than an interview. In fact, questionnaires are often simply mailed or handed to respondents with a minimum of explanation.
>
> Another advantage of the questionnaire is that respondents may have greater confidence of their anonymity and thus feel freer to express views they fear might be disapproved of or might get them into trouble.
>
> It may place less pressure on the subject for immediate response. When the subject is given ample time for filling out the questionnaire, he can consider each point carefully rather than replying with the first thought that comes to mind (Selting, C. et al, 1965, pp. 238-241).

After reviewing selected literature on the in-service needs assessment of teachers, the researcher judged that Ingersoll's Teachers' Needs Assessment Survey (TNAS) would be the primary source of data for this study.

The TNAS was designed

> . . . to provide a reliable and convenient format through which a variety of school systems could gather data to augment in-service planning (Ingersoll, 1976, p. 170).

The other reasons for using the TNAS as a source of data were that the teaching competency skills comprising

the instrument are very essential for initial decisions before implementing in-service activities, and the results of the study can be compared with those of some previous studies done.

The Development of the Instrument

Ingersoll used two primary resources to generate the TNAS.

First, he surveyed the following:

1. The 1970 Ed.D. dissertation by L. France, "Problems Perceived by Seventy-Five Beginning Elementary School Teachers."
2. A 1973 unpublished manuscript by J. Howell, "Methodological and Instructional Needs of In-Service Teachers."
3. A 1973 paper by T. L. Hallow et al, "An Investigation into Student Teacher Problems during Practice Teaching."

Second, he abstracted categories of teaching skills from the following catalogs of teacher competencies:

1. M. Bierly et al, "Teacher Training Products: The State of the Field," 1974.
2. R. C. Turner, "A General Catalog of Teacher Skills," 1973.

On the basis of the above, 43 items were selected. A sample of 745 teachers were asked to respond to each item and indicate on a Likert-type scale whether or not in-service training in a specific area or skill would be beneficial. Further, teachers were asked to respond to each item in two ways:

1. How they saw each training area as a personal need, and
2. How they saw each training area as a need of teachers in general.

The results showed exceptionally high estimates of internal consistency for the instrument,

> The reliability estimate for ratings of perceived training needs for "self" was .95 while the comparable estimate for perceived training needs of "others" was .97 for the needs assessment instrument . . . Further, the correlation between the mean ratings for "selves" and "others" over the 43 skill areas was rxy = .96, suggesting that the differences in rating of "selves" and "others" reduce to a nearly perfect linear transformation (Ingersoll, p. 170).

After submitting the 43 perceived training needs to factor analysis, Ingersoll identified and labelled the clusters as follows:

1. Interpersonal communication and administration.
2. Developing pupil self.
3. Individualizing instruction.
4. Assessment.
5. Discipline.
6. Developing personal self.
7. Classroom management.
8. Non-factor related items.

Previous Use of the TNAS

Since its development, the instrument has been used in several studies of in-service needs of teachers, for example:

1. Ingersoll of Indiana University used it in 1975 to survey 745 elementary and secondary school teachers from selected districts in Illinois, Indiana, and New York.

2. Pitts used it in 1975 at Indiana University to determine teacher perceived needs for in-service education in a selected urban school district of 1800 teachers in Indiana.

3. Greene used it in 1977 at Hofstra University to make a comparative study of the perceptions of 40 elementary principals and 160 teachers in New York, regarding needs of teachers' skills development.

4. Evans used it during the Spring of 1977 to assess needs of 119 teachers of the Syracuse Urban Teaching Center.

5. Grandgenett used it in 1978 at the University of Iowa to assess in-service needs among teachers by studying the perceptions of teachers, principals, and area education personnel in the State of Iowa.

6. Al-Ghamdi used it in 1982 at Michigan State University to determine the perceived in-service training needs of teachers of Jeddah City in Saudi Arabia.

7. In 1983 Wright of Andrews University used a modified version of Ingersoll's TNAS to assess the perceived in-service needs of K-12 teachers of the Lake Union Conference of Seventh-Day Adventists.

The present study has extended the use of the TNAS to study the perceptions of teachers, principals, subject advisors, and inspectors as regards the in-service needs of black secondary school teachers in the Republic of South Africa.

To include items which Ingersoll identified as non-factor related, Grandgenett further factor-analyzed the 43 items into a slightly different group of seven clusters with the following descriptors: (i) Developing pupil self-concept, (ii) Handling classroom problems, (iii) Individualizing instruction, (iv) Evaluating programs and achievement, (v) Planning instructional programs, (vi) Developing personal self, and (vii) Managing classroom instruction.

Pilot Testing

The researcher pilot tested the questionnaire of 43 items among 10 respondents from Africa enrolled in the College of Education at Michigan State University; five came from South Africa, one from Swaziland (which shares boundaries with South Africa), two from Ghana, and two from Nigeria. Like South Africa, the other countries are former colonies of Britain, and share many similarities in their educational systems. It was assumed that 10 teachers in the pilot sample share common teaching experiences with the target population of black secondary school teachers in the Republic of South Africa.

The aims of the pilot test were:

1. To determine the average time it takes to complete the questionnaire -- the respondents were asked to time themselves.
2. To find out items that may not be related to the activities of black teachers in South Africa.

3. To solicit comments on the clarity of the instrument.

4. To solicit comments on items the researcher included after reviewing literature on in-service education.

The following were the results of the pilot test:

1. The average completion time of the questionnaire was 29 minutes.

2. Three items were determined not applicable to black secondary teachers in the RSA:
   (a) Involving others in the school program.
   (b) Representing the school and school program at meetings.
   (c) Compromising personal administrative practices with directives from the principal, etc.

3. Six additional items were included, which are items 1, 11, 28, 41, 45, and 46.(see Appendix H).

4. For purposes of clarity and English language usage, the following items were restated; 7, 17, 19, 20, 22, 29, 32, 34, 36, and 40.

The questionnaire was further pilot tested in South Africa among a sample of 20 teachers from the target population, and was found to be appropriate.

The Questionnaire

The questionnaire used had 46 items that were arranged randomly to avoid creating a response set among the respondents. Because of the original and subsequent use of the factor analysis technique in the instrument, that was not done. The previous use of factor analysis gave the instrument both construct and content validity as already indicated.

The cluster descriptors in this study are:

1. Developing pupil self, made up of items 16, 22, 27, 33, 35, 44, and 45.
2. Developing personal self, made up of items 2, 4, 10, 13, 14, 30, and 42.
3. Handling classroom problems, made up of items 5, 6, 28, 34, and 46.
4. Managing classroom instruction, made up of items 11, 17, 24, 25, 26, 29, 31, and 37.
5. Evaluating and assessing achievement, made up of items 3, 12, 19, 20, 21, 23, 32, and 39.
6. Individualizing instruction, made up of items 8, 9, 15, 18, and 41.
7. Planning instruction, made up of items 1, 7, 36, 38, 40, and 43.

Distribution and Data Collection

Permission was sought to conduct the research in the Department in July-August 1984 and was granted (See Appendices C, D, and E). The researcher travelled to all the sampled schools to personally administer the questionnaire to groups of selected teachers and principals. Questionnaires for subject advisors and inspectors were given to circuit inspectors, to be mailed back after completion.

Each questionnaire was accompanied by a letter of transmittal (See Appendix F):

1. Explaining the purpose of the research,
2. Urging the participants to respond to all items as accurately and truthfully as possible, and

3. Assuring the anonymity of the respondents.

Directions were given to the respondents as to how to answer, and a sample example was given (see Appendix G).

A 5-point Likert scale measurement was used with the following scale:

1 = Strongly Agree (SA)

2 = Agree (A)

3 = Neutral (N)

4 = Disagree (D)

5 = Strongly Disagree (SD)

The teachers were to respond according to their perception of their own needs. Principals, subject advisors, and inspectors were asked to respond according to how they perceive the in-service needs of teachers.

The number of questionnaires completed and returned are as in the table below.

TABLE 4.2 QUESTIONNAIRES DISTRIBUTED AND RESPONSES

Role Group	Number in Sample	Number of Responses	Responses %
Teachers	300	300	100
Principals	60	60	100
*Subject Advisors	45	34	76
*Inspectors	45	31	69
TOTAL	450	425	94.4

Treatment and Analysis of Data

Data collected was entered using a batch entry terminal at the Michigan State University Computer Center. The data analysis was performed using the Statistical Package for Social Sciences (SPSS) on the Cyber 750.

The mean and standard deviation ratings were used to analyze the overall perceptions of all respondents on each item of the 46 item statements included in the instrument.

The mean ratings were used to rank order the selected competencies in regard to perceived importance for in-service needs. The seven descriptors of competencies were rank-ordered according to the means as perceived by all four role groups and by each role group.

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*According to the establishment, the posts of subject advisors and inspectors are 45 for each group, but some of the incumbents were not available.

To determine significant differences among the groups of respondents for all the seven clusters, the major hypotheses posed were tested by utilizing the analysis of variance test. The alpha level of significance was set at .05.

Summary

The purpose of this study was to compare the perceptions by teachers, principals, subject advisors, and school inspectors, of in-service needs of black secondary school teachers in the Republic of South Africa.

The chapter described the variables, questions and hypotheses, the target population, procedures in sampling, and methods used in collecting and analyzing the data.

A two part questionnaire was used. The first part asked the respondents to identify their respective role groups, while the second part sought to collect the data necessary to answer the questions posed by the study. Of a total of 450 questionnaires distributed, 425 (94.4%) were returned and were all usable in the study.

Responses to the questionnaire were entered using a batch entry terminal at the Michigan State University Computer Center, and the analysis was performed using the SPSS on the Cyber 750.

The results of these analyses are presented in the next chapter.

CHAPTER V

RESULTS OF THE STUDY

Introduction

The main purpose of this research was to compare perceptions of teachers, principals, subject advisors, and inspectors regarding the in-service needs of black secondary school teachers in the RSA.

The findings of the study are reported in five sections. The first section describes the respondents among the variables of role groups. The second section reports findings regarding the perceived importance of the selected competencies and how they were rated by all respondents. The third section presents findings related to perception of in-service needs in all 46 competency statements by each role group. The fourth section reports findings related to perceptions of needs in all seven clusters of teaching competencies by all the respondents and by each role group. The fifth section is on differences of perceptions, and presents results from hypotheses tested.

Description of Respondents

The first part of the research questionnaire was designed to obtain information regarding role group of each respondent. In all, 450 questionnaires were distributed, and the returned responses totaled 425 or 94.4 percent. All the returned responses were usable in the data analysis.

The 425 people who took part in this research by responding to the questionnaire were teachers of secondary schools, principals of secondary schools, subject advisors, and inspectors. Distribution can be seen from Table 5.1 below.

TABLE 5.1 DISTRIBUTION OF RESPONDENTS BY ROLE GROUP

Role Group	N	Percent
Teachers	300	70.6
Principals	60	14.1
Subject Advisors	34	8.0
Inspectors	31	7.3
TOTAL	425	100.0

Perceived Importance of Selected Competencies

This section deals with perceptions of the 46 selected competency skills and how they were rated by all the respondents in the sample.

The respondents were asked to record their responses on a five-point scale i.e. from point 1 to 5 with point 3 as neutral. Points 1 and 2 were assigned to indicate an agreement with a need, while points 4 and 5 indicated a disagreement. The competency statement(s) given a score of either 1 or 2 were designated important competencies and those with a score of either 4 or 5 were considered unimportant.

The first research question asked:

> How do all the respondents order the teaching competencies when asked to identify the in-service needs of teachers?

To show importance of the selected skill areas, responses to each competency statement by all subjects were tabulated in rank order according to the means and standard deviations. These results are presented in Table 5.2 below.

TABLE 5.2 ORDER OF PERCEIVED IMPORTANCE OF NEEDS BY ALL RESPONDENTS

Item No.	Competency Statement	$\bar{x}$	S.D.
37	Utilizing audio-visual equipment and other mechanical aids, i.e. teaching aids	1.435	.701
24	Planning teaching activities with other teachers or administrators	1.532	.804
45	Skills in providing career guidance	1.541	.729
27	Instilling in students the will to learn on their own initiative	1.579	.903
26	Keeping abreast of development in one's subject matter area	1.666	.989
1	Practical details of recently introduced schemes of work and daily preparation of lessons	1.680	.922
8	Diagnosing basic learning difficulties	1.704	.915
12	Constructively using evaluation in helping students' progress	1.713	.823
9	Creating useful remedial materials	1.734	.834
3	Constructing and using tests for evaluating academic progress	1.739	.981
36	Deciding what teaching technique is best for a particular intended outcome	1.744	.862
2	Using questioning procedures to promote discussion	1.748	.824
46	Methods of improving class attendance or reducing absenteeism	1.753	1.058
31	Providing for motivation and reinforcement	1.755	.891
33	Identifying student disabilities that need referral or special remedial work	1.762	.886

Item No.	Competency Statement	$\bar{x}$	S.D.
43	Maintaining professional relationships with other teachers	1.781	1.012
34	Effectively maintaining classroom control without threatening or terrorizing students	1.807	1.127
32	Evaluating a lesson and the preparation of a lesson	1.835	.967
5	Useful methods of classroom discipline and how to use them	1.849	.998
23	Involving students in self-evaluation	1.866	.985
21	Establishing appropriate standards of performance for students	1.873	.886
30	Identifying student attitudes in order to better relate to student problems	1.894	.932
16	Facilitating development of pupil reponsibility	1.894	.929
28	Acceptable methods of handling disruptive students	1.901	.986
39	Selecting and specifying performance goals and objectives	1.920	.905
40	Gearing instruction towards problem-solving	1.962	.983
15	Selecting and developing materials and activities which are appropriate for individualizing instruction	1.965	1.010
41	Skills in providing for the individual differences among students	1.969	.977
6	Knowing where to refer student problems beyond those which can be handled by the teacher	1.979	1.093
44	Stimulating growth of pupil attitudes and values	1.981	.877

Item No.	Competency Statement	$\bar{x}$	S.D.
11	Methods of dealing with large classes of varied abilities with little equipment or space	2.009	1.384
35	Facilitating pupil self-concept and feelings of self-worth	2.014	.949
42	Developing a teacher's personal self evaluation method	2.019	1.053
29	Deciding an appropriate pupil grouping procedures for teaching	2.033	.963
38	Communicating with and interacting with parents	2.040	1.046
4	Accepting teacher's personal responsibilities	2.068	1.115
7	Managing classroom affairs to obtain maximum benefit from supervising aides, subject advisors, etc.	2.092	1.066
22	Facilitating social interaction among pupils	2.179	.981
19	Developing or modifying teaching procedures to suit own strengths	2.226	1.166
10	Developing a capacity for accepting the feelings of others	2.228	1.110
17	Arranging the physical environment (seating arrangements in class, charts, etc.)	2.275	1.148
14	Counseling and conferring with students	2.299	1.098
25	Making general presentations of information and directions	2.334	.955
18	Implementing individualization instruction	2.353	1.056
13	Developing a broad acceptance of self	2.367	1.093
20	Coping with the task of assigning marks	2.525	1.141

Table 5.2 show that respondents gave high ratings for almost all 46 statements. The mean ratings reveal that the teachers, principals, subject advisors, and inspectors who participated in this study regarded the selected competency skills as important in the professional development of secondary school teachers. As can be seen from the table, the average mean ratings range from ($\bar{x}$ = 1.435) to ($\bar{x}$ = 2.525).

Role Groups' Perceptions of Importance of Needs

This section reports responses to the 46 statements by each of the four role groups; the teachers, principals, subject advisors, and inspectors.

Perception by Teachers

The second research question asked:

> How do teachers responding to the survey order the teaching competencies when asked to identify their own in-service needs?

The teachers held high perceptions of in-service needs in the selected areas of competencies. According to Table 5.3 below the average mean ratings ranged from ($\bar{x}$ = 1.450) to ($\bar{x}$ = 2.553). Twenty-six items or 56.5 percent received mean ratings of ($\bar{x}$ = 1.000) to ($\bar{x}$ = 2.000), while no statements were rated between ($\bar{x}$ = 4.000) and ($\bar{x}$ = 5.000).

TABLE 5.3 ORDER OF PERCEIVED IMPORTANCE OF NEEDS BY TEACHERS

Item No.	Competency Statement	$\bar{x}$	S.D.
37	Utilizing audio-visual equipment and other mechanical aids, i.e. teaching aids	1.450	.737
45	Skills in providing career guidance	1.510	.734
24	Planning teaching activities with other teachers or administrators	1.570	.865
27	Instilling in students the will to learn in their own initiative	1.590	.941
12	Constructively using evaluation in helping students' progress	1.717	.844
1	Practical details of recently introduced schemes of work and daily preparation of lessons	1.753	.995
3	Constructing and using tests for evaluating academic progress	1.757	1.040
31	Providing for motivation and reinforcement	1.760	.890
2	Using questioning procedures to promote discussion	1.763	.877
8	Diagnosing basic learning difficulties	1.767	.960
36	Deciding what teaching technique is best for a particular intended outcome	1.783	.898
33	Identifying student disabilities that need referral or special remedial work	1.790	.899
43	Maintaining professional relationships with other teachers	1.797	1.045
46	Methods of improving class attendance or reducing absenteeism	1.797	1.122
9	Creating useful remedial materials	1.817	.871

Item No.	Competency Statement	$\bar{x}$	S.D.
26	Keeping abreast of developments in one's subject matter area	1.817	1.071
23	Involving students in self-evaluation	1.867	1.029
34	Effectively maintaining classroom control without threatening or terrorizing students	1.873	1.176
30	Identifying student attitudes in order to better relate to student problems	1.890	.939
32	Evaluating a lesson and the preparation of a lesson	1.897	1.015
21	Establishing appropriate standards of performance for students	1.903	.922
5	Useful methods of classroom discipline and how to use them	1.917	1.083
16	Facilitating development of pupil responsibility	1.927	.975
28	Acceptable methods of handling disruptive students	1.927	.992
39	Selecting and specifying performance goals and objectives	2.000	.914
17	Arranging the physical environment (seating arrangements in class, charts, etc.)	2.000	1.157
6	Knowing where to refer student problems beyond those which can be handled by the teacher	2.017	1.138
41	Skills in providing for the individual differences among students	2.027	.974
15	Selecting and developing materials and activities which are appropriate for individualizing instruction	2.027	1.069
42	Developing a teacher's personal self evaluation method	2.030	1.068

Item No.	Competency Statement	$\bar{x}$	S.D.
44	Stimulating growth of pupil attitudes and values	2.037	.926
29	Deciding on appropriate pupil grouping procedures	2.060	.997
40	Gearing instruction towards problem-solving	2.067	.996
35	Facilitating pupil self-concept and feelings of self-worth	2.070	.949
38	Communicating with and interacting with parents	2.073	1.086
4	Accepting teacher's personal responsibilities	2.090	1.128
22	Facilitating social interaction among pupils	2.170	1.012
11	Methods of dealing with large classes of varied abilities with little equipment or space	2.190	1.495
10	Developing a capacity for accepting the feelings of others	2.203	1.157
19	Developing or modifying teaching procedures to suit own strengths	2.257	1.212
7	Managing classroom affairs to obtain maximum benefit from supervising aides, subject advisors, etc.	2.273	1.115
25	Making general presentations of information and directions	2.340	.970
13	Developing a broad acceptance of self	2.377	1.128
14	Counseling and conferring with students	2.457	1.113
18	Implementing individualized instruction	2.473	1.036
20	Coping with the task of assigning marks	2.553	1.165

The mean ratings by this role group indicated that the twelve most needed competencies for in-service education of secondary teachers are in the following order:

-Utilizing audio-visual equipment and other mechanical aids, i.e. teaching aids.

-Skills in providing career guidance.

-Planning teaching activities with other teachers or administrators.

-Instilling in students the will to learn in their own initiative.

-Constructively using evaluation in helping students' progress.

-Practical details of recently introduced schemes of work and daily preparation of lessons.

-Constructing and using tests for evaluating academic progress.

-Providing for motivation and reinforcement.

-Using questioning procedures to promote discussion.

-Diagnosing basic learning difficulties.

-Deciding what teaching technique is best for a particular intended outcome.

-Identifying student disabilities that need referral or special remedial work.

Perception by Principals

The third research question asked:

How do principals responding to the survey order the teaching competencies when asked to identify in-service needs of teachers?

The principals sampled perceived the need areas as being areas of high priority. Table 5.4 below showed that mean ratings ranged from ($\bar{x}$ = 1.367) to ($\bar{x}$ = 2.550). Thirty-seven competency statements or 80.4 percent of the total number of statements were rated between mean ratings of ($\bar{x}$ = 1.000) to ($\bar{x}$ = 2.000), while no statements were rated between ($\bar{x}$ = 4.000) and ($\bar{x}$ = 5.000).

TABLE 5.4 ORDER OF PERCEIVED IMPORTANCE OF NEEDS BY PRINCIPALS

Item No.	Competency Statement	$\bar{x}$	S.D.
1	Practical details of recently introduced schemes of work and daily preparation of lessons	1.367	.663
26	Keeping abreast of developments in one's subject matter area	1.367	.712
24	Planning teaching activities with other teachers or administrators	1.417	.645
37	Utilizing audio-visual equipment and other mechanical aids, i.e. teaching aids	1.433	.647
8	Diagnosing basic learning difficulties	1.450	.723
27	Instilling in students the will to learn in their own initiative	1.533	.892
11	Methods of dealing with large classes of varied abilities with little equipment or space	1.533	.892
9	Creating useful remedial materials	1.550	.769
2	Using questioning procedures to promote discussion	1.567	.533

Item No.	Compentency Statement	$\bar{x}$	S.D.
45	Skills in providing career guidance	1.567	.673
46	Methods of improving class attendance or reducing absenteeism	1.567	.789
3	Constructing and using tests for evaluating academic progress	1.617	.846
32	Evaluating a lesson and the preparation of a lesson	1.650	.820
12	Constructively using evaluation in helping students' progress	1.683	.676
40	Gearing instruction towards problem-solving	1.683	.792
5	Useful methods of classroom discipline and how to use them	1.700	.743
36	Deciding what teaching technique is best for a particular intended outcome	1.733	.710
39	Selecting and specifying performance goals and objectives	1.733	.841
33	Identifying student disabilities that need referral or special remedial work	1.733	.899
44	Stimulating growth of pupil attitudes and values	1.767	.789
34	Efrectively maintaining classroom control without threatening or terrorizing students	1.767	1.110
7	Managing classroom affairs to obtain maximum benefit from supervising aides, subject advisors, etc.	1.783	.783
31	Providing for motivation and reinforcement	1.783	.940
41	Skills in providing for the individual differences among students	1.783	.993
30	Identifying student attitudes in order to better relate to student problems	1.800	.898

Item No.	Competency Statement	$\bar{x}$	S.D.
21	Establishing appropriate standards of performance for students	1.817	.792
15	Selecting and developing materials and activities which are appropriate for individualizing instruction	1.833	.960
14	Counseling and conferring with students	1.850	.899
6	Knowing where to refer student problems beyond those which can be handled by the teacher	1.867	.965
28	Acceptable methods of handling disruptive students	1.867	1.033
43	Maintaining professional relationships with other teachers	1.867	1.016
16	Facilitating development of pupil responsibility	1.883	.783
23	Involving students in self-evaluation	1.883	.904
35	Facilitating pupil self-concept and feelings of self-worth	1.933	.954
38	Communicating with and interacting with parents	1.900	.986
4	Accepting teacher's personal responsibilities	1.933	1.087
17	Arranging the physical environment (seating arrangements in class, charts, etc.)	2.000	1.010
29	Deciding on appropriate pupil grouping procedures for teaching	2.050	.946
18	Implementing individualized instruction	2.067	1.071
42	Developing a teacher's personal self evaluation method	2.083	1.109
10	Developing a capacity for accepting the feelings of others	2.133	.892

Item No.	Competency Statement	$\bar{x}$	S.D.
13	Developing a broad acceptance of self	2.150	1.022
19	Developing or modifying teaching procedures to suit own strengths	2.167	1.028
22	Facilitating social interaction among pupils	2.267	.899
25	Making general presentations of information and directions	2.300	.889
20	Coping with the task of assigning marks	2.550	1.064

Responses of secondary school principals indicated that their perceptions of in-service needs of teachers were relatively greater than the perceptions of secondary school teachers themselves. The first twelve most needed competencies identified by principals were:

-Practical details of recently introduced schemes of work and daily preparation of lessons.

-Keeping abreast of developments in one's subject matter area.

-Planning teaching activities with other teachers or administrators.

-Utilizing audio-visual equipment and other mechanical aids, i.e. teaching aids.

-Diagnosing basic learning difficulties.

-Instilling in students the will to learn in their own initiative.

-Methods of dealing with large classes of varied abilities with little equipment or space.

-Creating useful remedial materials.

-Using questioning procedures to promote discussion.

-Skills in providing career guidance.

-Methods of improving class attendance or reducing absenteeism.

-Constructing and using tests for evaluating academic progress.

Perception by Subject Advisors

The fourth research question asked:

How do subject advisors responding to the survey order the teaching competencies when asked to identify in-service needs of teachers?

For this group of respondents the mean ratings ranged from ($\bar{x}$ = 1.265) to ($\bar{x}$ = 2.588), as shown by Table 5.5 below. Thirty-three competency statements or 41.7 percent of the total number of statements were rated between mean ratings of ($\bar{x}$ = 1.000) to ($\bar{x}$ = 2.000), whilst no statements were rated between ($\bar{x}$ = 4.000) and ($\bar{x}$ = 5.000) to show unfavorableness.

TABLE 5.5 ORDER OF PERCEIVED IMPORTANCE OF NEEDS BY SUBJECT ADVISORS

Item No.	Competency Statement	$\bar{x}$	S.D.
26	Keeping abreast of developments in one's subject matter area	1.265	.567
37	Utilizing audio-visual equipment and other mechanical aids, i.e. teaching aids	1.441	.613
36	Deciding what teaching technique is best for a particular intended outcome	1.500	.663
7	Managing classroom affairs to obtain maximum benefit from supervising aides, subject advisors, etc.	1.529	.507
27	Instilling in students the will to learn in their own initiative	1.529	.748
24	Planning teaching activities with other teachers or administrators	1.588	.701
1	Practical details of recently introduced schemes of work and daily preparation of lessons	1.618	.697
32	Evaluating a lesson and the preparation of a lesson	1.647	.734
43	Maintaining professional relationships with other teachers	1.647	.774
34	Effectively maintaining classroom control without threatening or terrorizing students	1.676	.976
9	Creating useful remedial materials	1.706	.629
31	Providing for motivation and reinforcement	1.706	.676
8	Diagnosing basic learning difficulties	1.706	.760
45	Skills in providing career guidance	1.706	.799

Item No.	Competency Statement	$\bar{x}$	S.D.
46	Methods of improving class attendance or reducing absenteeism	1.706	1.001
11	Methods of dealing with large classes of varied abilities with little equipment or space	1.706	1.115
5	Useful methods of classroom discipline and how to use them	1.765	.781
33	Identifying student disabilities that need referral or special remedial work	1.765	.890
6	Knowing where to refer student problems beyond those which can be handled by the teacher	1.500	.663
39	Selecting and specifying performance goals and objectives	1.824	.904
35	Facilitating pupil self-concept and feelings of self-worth	1.824	.936
12	Constructively using evaluation in helping students' progress	1.824	.999
3	Constructing and using tests for evaluating academic progress	1.853	.821
16	Facilitating development of pupil responsibility	1.853	.925
2	Using questioning procedures to promote discussion	1.882	.808
21	Establishing appropriate standards of performance for students	1.882	.946
40	Gearing instruction towards problem-solving	1.882	1.066
44	Stimulating growth of pupil attitudes and values	1.912	.621
15	Selecting and developing materials which are appropriate for individualizing instruction	1.912	.793

Item No.	Competency Statement	$\bar{x}$	S.D.
29	Deciding on appropriate pupil grouping procedures for teaching	1.941	.814
23	Involving students in self-evaluation	1.941	.983
42	Developing a teacher's personal self evaluation method	1.971	.937
28	Acceptable methods of handling disruptive students	1.971	.969
30	Identifying student attitudes in order to better relate to student problems	2.059	.983
41	Skills in providing for the individual differences among students	2.059	1.127
38	Communicating with and interacting with parents	2.088	.900
14	Counseling and conferring with students	2.118	1.094
4	Accepting teacher's personal responsibilities	2.147	1.184
18	Implementing individualized instruction	2.176	.999
22	Facilitating social interaction among pupils	2.206	.946
19	Developing or modifying teaching procedures to suit own strengths	2.235	1.075
25	Making general presentations of information and directions	2.353	1.012
10	Developing a capacity for accepting the feelings of others	2.441	1.021
17	Arranging the physical environment (seating arrangements in class, charts, etc.)	2.441	1.160
13	Developing a broad acceptance of self	2.559	.960
20	Coping with the task of assigning marks	2.588	1.209

The twelve highest perceived needs for in-service training of teachers, as identified by this group of subject advisors, were the following:

-Keeping abreast of developments in one's subject matter area.

-Utilizing audio-visual equipment and other mechanical aids, i.e. teaching aids.

-Deciding what teaching technique is best for a particular intended outcome.

-Managing classroom affairs to obtain maximum benefit from supervising aides, subject advisors, etc.

-Instilling in students the will to learn in their own initiative.

-Planning teaching activities with other teachers or administrators.

-Practical details of recently introduced schemes of work and daily preparation of lessons.

-Evaluating a lesson and the preparation of a lesson.

-Maintaining professional relationships with other teachers.

-Effectively maintaining classroom control without threatening or terrorizing students.

-Creating useful remedial materials.

-Providing for motivation and reinforcement.

Perception by Inspectors

The fifth research question asked:

How do inspectors responding to the survey order the teaching competencies when asked to identify in-service needs of teachers?

The average mean ratings of inspectors as in Table 5.6 below, ranged from ($\bar{x}$ = 1.226) to ($\bar{x}$ = 2.484). Thirty-seven statements or 80.4 percent of the total number of statements received ratings that ranged from ($\bar{x}$ = 1.000) to ($\bar{x}$ = 2.000), and no statement received a rating between ($\bar{x}$ = 4.000) to ($\bar{x}$ = 5.000).

TABLE 5.6 ORDER OF PERCEIVED IMPORTANCE OF NEEDS BY INSPECTORS

Item No.	Competency Statements	$\bar{x}$	S.D.
26	Keeping abreast of developments in one's subject matter area	1.226	.497
37	Utilizing audio-visual equipment and other mechanical aids, i.e. teaching aids	1.290	.529
24	Planning teaching activities with other teachers or administrators	1.323	.475
9	Creating useful remedial materials	1.323	.599
34	Effectively maintaining classroom control without threatening or terrorizing students	1.387	.667
11	Methods of dealing with large classes of varied abilities with little equipment or space	1.516	.851
33	Identifying student disabilities that need referral or special remedial work	1.548	.723
7	Managing classroom affairs to obtain maximum benefit from supervising aides, subject advisors, etc.	1.548	.995
5	Useful methods of classroom discipline and how to use them	1.581	.672

Item No.	Competency Statements	$\bar{x}$	S.D.
8	Diagnosing basic learning difficulties	1.581	.886
40	Gearing instruction towards problem-solving	1.581	.923
12	Constructively using evaluation in helping students' progress	1.613	.667
27	Instilling in students the will to learn in their own initiative	1.613	.715
45	Skills in providing career guidance	1.613	.715
39	Selecting and specifying performance goals and objectives	1.613	.844
43	Maintaining professional relationships with other teachers	1.613	.919
1	Practical details of recently introduced schemes of work and daily preparation of lessons	1.645	.709
16	Facilitating development of pupil responsibility	1.645	.709
28	Acceptable methods of handling disruptive students	1.645	.839
36	Deciding what teaching technique is best for a particular intended outcome	1.645	.950
15	Selecting and developing materials and activities which are appropriate for individualizing instruction	1.677	.599
21	Establishing appropriate standards of performance for students	1.677	.599
41	Skills in providing for the individual differences among students	1.677	.702
3	Constructing and using tests for evaluating academic progress	1.677	.791
31	Providing for motivation and reinforcement	1.710	1.039

Item No.	Competency statements	$\bar{x}$	S.D.
23	Involving students in self-evaluation	1.742	.682
46	Methods of improving class attendance or reducing absenteeism	1.742	.930
2	Using questioning procedures to promote discussion	1.806	.749
32	Evaluating a lesson and the preparation of a lesson	1.806	.946
29	Deciding on appropriate pupil grouping procedures for teaching	1.839	.820
14	Counseling and conferring with students	1.839	.934
35	Facilitating pupil self-concept and feelings of self-worth	1.839	.934
42	Developing a teacher's personal self evaluation method	1.839	.934
44	Stimulating growth of pupil attitudes and values	1.935	.727
30	Identifying student attitudes in order to better relate to student problems	1.935	.892
38	Communicating with and interacting with parents	1.935	.929
18	Implementing individualized instruction	1.935	1.093
4	Accepting teacher's personal responsibilities	2.032	.983
19	Developing or modifying teaching procedures to suit own strengths	2.032	1.080
22	Facilitating social interaction among pupils	2.065	.892
6	Knowing where to refer student problems beyond those which can be handled by the teacher	2.065	.998

Item No.	Competency statements	$\bar{x}$	S.D.
20	Coping with the task of assigning marks	2.129	.922
25	Making general presentations of information and directions	2.323	.909
10	Creating useful remedial materials	2.419	1.119
17	Skills in providing career guidance	2.452	1.312
13	Developing a broad acceptance of self	2.484	.996

The quality of the ratings indicate that inspectors perceived the strongest needs for in-service training for teachers of all the four groups sampled. Their twelve greatest needs were in the following competencies:

-Keeping abreast of developments in one's subject matter area.

-Utilizing audio-visual equipment and other mechanical aids, i.e. teaching aids.

-Planning teaching activities with other teachers or administrators.

-Creating useful remedial materials.

-Effectively maintaining classroom control without threatening or terrorizing students.

-Methods of dealing with large classes of varied abilities with little equipment or space.

-Identifying student disabilities that need referral or special remedial work.

-Managing classroom affairs to obtain maximum benefit from supervising aides, subject advisors, etc.

-Useful methods of classroom discipline and how to use them.

-Diagnosing basic learning difficulties.

-Gearing instruction towards problem-solving.

-Constructively using evaluation in helping students' progress.

The following two competencies were ranked in the first ten competencies perceived highest by each of the four role groups:

-Utilizing audio-visual equipment and other mechanical aids, i.e. teaching aids.

-Planning teaching activities with other teachers or administrators.

Of the last five competencies perceived lowest by each of all the four role groups, the following three are shared:

-Making general presentations of information and directions.

-Developing a broad acceptance of self.

-Coping with the task of assigning marks

Perceptions of Needs on the Seven Clusters

This section reports findings related to perceptions of needs in all seven clusters of teaching competencies. As may be recalled from the previous chapter, the 46 item survey instrument was divided into seven clusters. Each

of seven clusters was made up of several items as shown in Table 5.7.

TABLE 5.7 ITEMS MAKING UP EACH CLUSTER

CLUSTERS						
1	2	3	4	5	6	7
DPS	DPES	HCP	MCI	EAA	II	PI
16	2	5	11	3	8	1
22	4	6	17	12	9	7
27	10	28	24	19	15	36
33	13	34	25	20	18	38
35	14	46	26	21	41	40
44	30		29	23		43
45	42		31	32		
			37	39		

Key:

1. DPS = Developing Pupil Self
2. DPES = Developing Personal Self
3. HCP = Handling Classroom Problems
4. MCI = Managing Classroom Instruction
5. EAA = Evaluating and Assessing Achievement
6. II = Individualizing Instruction
7. PI = Planning Instruction

Perception by all Respondents

Mean ratings for the seven clusters in terms of their perceived importance were computed for the entire sample of 425 subjects, and then tabulated in rank-order as shown in Table 5.8 below. This was in answer to the sixth research question:

> How do the respondents order the teaching competencies along the seven clusters?

TABLE 5.8 ORDER OF PERCEIVED IMPORTANCE OF CLUSTERS OF NEEDS BY ALL RESPONDENTS

Name of Cluster	$\bar{x}$	S.D.
1. DPS	1.850	.582
2. HCP	1.858	.690
3. MCI	1.880	.499
4. PI	1.883	.585
5. II	1.945	.615
6. EAA	1.962	.552
7. DPES	2.089	.660

The table reveals that all respondents perceived the greatest in-service needs of teachers in competencies related to developing pupil self. Competencies related to developing personal self were rated by all respondents as the least important in-service education priority. The average mean ratings for all seven clusters in terms of their perceived importance ranged from ($\bar{x}$ = 1.850) to ($\bar{x}$ = 2.089).

Perception by Teachers

The teachers selected perceived the greatest in-service needs in competencies related to development of pupil self which received an average mean rating of ($\bar{x}$ = 1.8705). They considered the area of development of personal self as the least in-service needs with an average mean rating of ($\bar{x}$ = 2.1157). As shown in Table 5.9, teachers' average mean ratings for all clusters ranged from ($\bar{x}$ = 1.8705) to ($\bar{x}$ = 2.1157).

The above analysis was in answer to the seventh question:

> How do teachers order the seven clusters of teaching competencies when asked to identify their own in-service needs?

TABLE 5.9 ORDER OF PERCEIVED IMPORTANCE OF CLUSTERS OF NEEDS BY TEACHERS

Name of Cluster	$\bar{x}$	S.D.
1. DPS	1.8705	.5854
2. HCP	1.9060	.7136
3. MCI	1.9296	.5170
4. PI	1.9578	.6055
5. EAA	1.9937	.5548
6. II	2.0220	.6034
7. DPES	2.1157	.6714

Perception by Principals

Table 5.10 following gives the computed data to answer the eighth research question:

> How do principals order the seven clusters of teaching competencies when asked to identify the in-service needs of teachers?

The principals perceived the greatest in-service needs in competencies related to planning instruction. Like the teachers, they also perceived the least needs in competencies related to the teacher's personal self. According to the table the average mean ratings ranged from ($\bar{x}$ = 1.7222) to ($\bar{x}$ = 1.9310), and appears to be stronger than those of teachers.

TABLE 5.10 ORDER OF PERCEIVED IMPORTANCE OF CLUSTERS OF NEEDS BY PRINCIPALS

Name of Cluster	$\bar{x}$	S.D.
1. PI	1.7222	.4819
2. II	1.7367	.6265
3. HCP	1.7533	.6673
4. MCI	1.7625	.4096
5. DPS	1.8119	.5705
6. EAA	1.8875	.5292
7. DPES	1.9310	.5919

Perception by Subject Advisors

The ninth research question asked:

How do subject advisors order the seven clusters of teaching competencies when asked to identify the in-service needs of teachers?

Like the principals, subject advisors perceived the greatest in-service education needs in competencies related to planning instruction, with the least in needs related to the development of the teacher's personal self. As shown in Table 5.11, the average mean ratings of the perceptions by subject advisors for all seven clusters ranged from ($\bar{x}$ = 1.7108) to ($\bar{x}$ = 2.1681).

TABLE 5.11 ORDER OF PERCEIVED IMPORTANCE OF CLUSTERS OF NEEDS BY SUBJECT ADVISORS

Name of Cluster	$\bar{x}$	S.D.
1. PI	1.7108	.4482
2. HCP	1.7765	.5965
3. MCI	1.8051	.4188
4. DPS	1.8277	.6190
5. II	1.9118	.5953
6. EAA	1.9743	.5631
7. DPES	2.1681	.6025

Perception by Inspectors

The tenth research question asked:

> How do inspectors order the seven clusters of teaching competencies when asked to identify the in-service needs of teachers?

The inspectors seemed to be more concerned with individualizing instruction. According to Table 5.12, they perceived the greatest in-service needs in competencies related to individualizing instruction, followed by competencies related to planning instruction. The least in-service education needs perceived by the inspectors, as with all other role groups, were in competencies related to the development of the teacher's personal self. The average mean ratings

TABLE 5.12 ORDER OF PERCEIVED IMPORTANCE OF CLUSTERS OF NEEDS BY INSPECTORS

Name of Cluster	$\bar{x}$	S.D.
1. II	1.6387	.5524
2. PI	1.6613	.5569
3. HCP	1.6839	.5484
4. MCI	1.7097	.5004
5. DPS	1.7512	.5421
6. EAA	1.7863	.5364
7. DPES	2.0507	.7110

ranged from ($\bar{x}$ = 1.6387) to ($\bar{x}$ = 2.0507) and seem to be the strongest of the four role groups.

Differences in Perceptions of Clusters

This fifth section deals with differences and similarities in perceptions of the seven clusters of teaching competencies by the four role groups, and results from the hypotheses tested.

What follows are answers to the eleventh question:

> What are the differences that exist in the perceptions of teachers, principals, subject advisors, and inspectors concerning teachers' in-service needs along the seven clusters?

Differences

Table 5.13 below perhaps best gives differences in perception by each of the four role groups on the seven clusters, ranked from highest (1) to lowest (7).

TABLE 5.13 ROLE GROUPS' RANKING OF CLUSTERS

Cluster	Teachers' Rankings	Principals' Rankings	Subject Advisors' Rankings	Inspectors' Rankings
DPS	1	5	4	5
DPES	7	7	7	7
HCP	2	3	2	3
MCI	3	4	3	4
EAA	5	6	6	6
II	6	2	5	1
PI	4	1	1	2

The above table revealed that all the four role groups perceived the least in-service needs of teachers in competencies related to the development of teacher's personal self (DPES). Whilst teachers ranked the development of the pupil's self (DPS) highest, this category received a relatively low ranking from the three groups of administrators; principals, subject advisors, and inspectors. Further, the administrators seemed to rank planning instruction (PI) very

high, which is not the case with teachers. The four groups appear to be in relative agreement with the ranking of categories of handling classroom problems (HCP), managing classroom instruction (MCI), and evaluating and assessing achievement (EAA). Individualizing instruction (II) received very high ranking from both inspectors and principals, whilst teachers and subject advisors ranked it almost lowest.

Hypotheses

The study's research hypotheses were tested to determine if there were significant differences among the four role groups with regards to their perceptions of in-service education needs in the seven clusters of teaching competencies. Analysis of variance was used to determine the effect of role groups on perceptions of needs along each cluster. There were seven one-way Anova tests done.

H_{o_1}: There are no significant differences in the perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of developing pupil self (DPS) in which teachers have in-service needs.

TABLE 5.14 ANALYSIS OF VARIANCE OF DPS IN-SERVICE NEEDS CLUSTER ACCORDING TO ROLE GROUPS

Source of Variance	Sum of Squares	Df	Mean Square	F	Significance of F
Group Effects	.533	3	.178	.522	.667
Residual	143.140	421	.340		
TOTAL	143.673	424	.339		

*Hypothesis tested at .05 level

The above table revealed that the value of the F-test with degrees of freedom (Df = 3) was (F = .522), and the value of p was ($p \leq .667$). The null hypothesis could not be rejected (was accepted). This indicated that there were no significant differences among the four role groups, in regard to their perceptions of in-service needs of cluster of developing pupil self. The cell means on this cluster by the groups were as follows:

Teachers = 1.87

Principals = 1.81

Subject Advisors = 1.83

Inspectors = 1.75

These means are all on the agreement side on the five-point scale.

H_{o_2}: There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of developing personal self (DPES) in which teachers have in-service needs.

TABLE 5.15 ANALYSIS OF VARIANCE OF DPES IN-SERVICE NEEDS CLUSTER ACCORDING TO ROLE GROUPS

Source of Variance	Sum of Squares	Df	Mean Square	F	Significance of F
Group Effects	1.971	3	.657	1.515	.210
Residual	182.596	421	.434		
TOTAL	184.567	424	.435		

*Hypothesis tested at .05 level

Table 5.15 revealed that there were no significant differences on role group perceptions of in-service needs cluster of developing personal self. The value of the F-test with degrees of freedom (Df = 3) was (F = 1.515), and the value of p was ($p \leq .210$). The null hypothesis was therefore not rejected. The means on this cluster by the group were as follows:

Teachers = 2.12

Principals = 1.93

Subject Advisors = 2.17

Inspectors = 2.05

H_{o_3}: There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of handling classroom problems (HCP) in which teachers have in-service needs.

TABLE 5.16 ANALYSIS OF VARIANCE OF HCP IN-SERVICE NEEDS CLUSTER ACCORDING TO ROLE GROUPS

Source of Variance	Sum of Squares	Df	Mean Square	F	Significance of F
Group Effects	2.514	3	.838	1.770	.152
Residual	199.302	421	.473		
TOTAL	201.816	424	.476		

*Hypothesis tested at .05 level

The table (5.16) showed that the value of the F-test with degrees of freedom (DF = 3) was (F = 1.770) which was not significant at ($p \leq .152$). Since the null hypothesis could not be rejected, the indication was that there were no significant differences on role group perceptions of in-service needs cluster of handling classroom problems. The cell means on this cluster by the role groups were as follows:

Teachers = 1.91

Principals = 1.75

Subject Advisors = 1.78

Inspectors = 1.68

H_{o_4} : There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of managing classroom instruction (MCI) in which teachers have in-service needs.

TABLE 5.17 ANALYSIS OF VARIANCE OF MCI IN-SERVICE NEEDS CLUSTER ACCORDING TO ROLE GROUPS

Source of Variance	Sum of Squares	Df	Mean Square	F	Significance of F
Group Effects	2.656	3	.885	3.614	.013
Residual	103.131	421	.245		
TOTAL	105.786	424	.249		

*Hypothesis tested at .05 level

The above table showed that the value of the F-test with degrees of freedom (Df = 3) was (F = 3.614), and was significant at α = .05 level ($p \leq$ = .013). The null hypothesis was rejected, indicating that there were significant differences on role group perceptions of in-service needs cluster of managing classroom instruction. The cell means on this cluster by the role groups was as follows:

Teachers = 1.93

Principals = 1.76

Subject Advisors = 1.81

Inspectors = 1.71

H_{o_5} : There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of evaluating and assessing achievement (EAA) in which teachers have in-service needs.

TABLE 5.18 ANALYSIS OF VARIANCE OF EAA IN-SERVICE NEEDS CLUSTER ACCORDING TO ROLE GROUPS

Source of Variance	Sum of Squares	Df	Mean Square	F	Significance of F
Group Effects	1.598	3	.533	1.756	.155
Residual	127.650	421	.303		
TOTAL	129.248	424	.305		

* Hypothesis tested at .05 level

Table 5.18 showed that the value of the F-test with degrees of freedom (Df = 3) was (F = 1.756) and the value of p was ($p \leq .155$). The null hypothesis could not be rejected (was accepted). This indicated that there were no significant differences among the four role groups in regards to their perceptions of in-service needs cluster of evaluating and assessing achievement. The cell means on this cluster were as follows:

Teachers = 1.99

Principals = 1.89

Subject Advisors = 1.97

Inspectors = 1.79

H_{o_6} : There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of individualizing instruction (II) in which teachers have in-service needs.

TABLE 5.19 ANALYSIS OF VARIANCE OF II IN-SERVICE NEEDS CLUSTER ACCORDING TO ROLE GROUPS

Source of Variance	Sum of Squares	Df	Mean Square	F	Significance of F
Group Effects	7.329	3	2.443	6.728	.001
Residual	152.863	421	.361		
TOTAL	160.192	424	.378		

*Hypothesis tested at .05 level

Table 5.19 revealed that the value of F-test with degrees of freedom (Df = 3) was (F = 6.728), and was significant at ($P \leq .001$). The null hypothesis was rejected, indicating that there were significant differences on role group perceptions of in-service needs cluster of individualizing instruction. The cell means on this cluster by the role groups were as follows:

Teachers = 2.02

Principals = 1.74

Subject Advisors = 1.91

Inspectors = 1.83

H_{o_7}: There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of planning instruction (PI) in which teachers have in-service needs.

TABLE 5.20 ANALYSIS OF VARIANCE OF PI IN-SERVICE NEEDS CLUSTER ACCORDING TO ROLE GROUPS

Source of Variance	Sum of Squares	Df	Mean Square	F	Significance of F
Group Effects	5.761	3	1.920	5.805	.001
Residual	139.268	421	.331		
TOTAL	145.029	424	.342		

*Hypothesis test at .05 level

The above table showed that the value of the F-test with degrees of freedom (Df = 3) was (F = 5.805), and was significant at ($p \leq .001$). The null hypothesis was rejected, indicating that there were significant differences on role group perceptions of in-service needs cluster of planning instruction. The cell means on this cluster was as follows:

Teachers = 1.96

Principals = 1.72

Subject Advisors = 1.71

Inspectors = 1.66

In conclusion, the testing of the foregoing F-tests at .05 level of significance showed that significant differences of perceptions occurred on three clusters; managing classroom instruction, individualizing instruction, and planning instruction, as shown in Table 5.21 below. Further, no significant differences of perceptions occurred on the four clusters; developing pupil self, developing personal self, handling classroom problems, and evaluating and assessing achievement.

TABLE 5.21 SUMMARY OF F-TESTS FOR CLUSTERS ACCORDING TO ROLE GROUPS

Cluster	Sum of Squares	Df	Mean Square	F	Significance of F
DPS	.533	3	.178	.522	.667
DPES	1.971	3	.657	1.515	.210
HCP	2.514	3	.838	1.770	.152
MCI	2.656	3	.885	3.614	.013*
EAA	1.598	3	.533	1.756	.155
II	7.329	3	2.443	6.728	.001*
PI	5.761	3	1.920	5.805	.001*

*Significant at .05 level

CHAPTER VI

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter summarizes the main features of the research study, and includes conclusions and recommendations based on the findings. It is divided into four main sections: (1) brief review of the study, (2) summary of major findings, (3) conclusions, and (4) recommendations.

Brief Review of the Study

In-service education of teachers has become one of the top priorities in all educational systems. Not only are the developed countries engaged in crucial innovations to meet the challenges generated by unprecedented knowledge explosion, but the developing countries are also feverishly trying to meet these challenges despite the characteristic lack of technical know-how.

The rigid South African society is characterized by segregated education departments. There has been pronounced tardiness in black education for the past three-and-half decades as compared to education for the other racial groups. Organized forms of in-service education for the black teachers

is a late phenomenon, and absence of teacher involvement in planning renders such activities very ineffectual.

Since black education is characterized by tardiness and meeting in-service needs of teachers is crucial, plus the fact that no study of in-service needs of black educators is available yet, and that the four key groups of educators are teachers, principals, subject advisors, and inspectors, the rationale was:

(i) to see how the four role groups rank the in-service needs, and

(ii) to see if the groups differ in perceptions.

How the needs are ranked may show where priorities belong, and if perceptions are different then probably that is one of the sources of tardiness in black education.

This study was partly an attempt to identify the in-service education needs of black secondary school teachers in a department of education in the RSA, and more importantly how the in-service needs were perceived by the teachers themselves, secondary school principals, subject advisors, and inspectors.

It is intended that the findings may serve as basis for establishing a framework of understanding by which in-service education of black teachers in the RSA could improve.

The study sought answers to the following seven questions:

1. How do all the respondents order the teaching competencies when asked to identify the in-service needs of teachers?

2. How do teachers responding to the survey order the teaching competencies when asked to identify their own in-service needs.

3. How do principals responding to the survey order the teaching competencies when asked to identify in-service needs of teachers?

4. How do subject advisors responding to the survey order teaching competencies when asked to identify in-service needs of teachers?

5. How do inspectors responding to the survey order teaching competencies when asked to identify in-service needs of teachers?

6. How do the respondents order the teaching competencies along the seven clusters?

7. What are the differences that exist in the perceptions of teachers, principals, subject advisors, and inspectors, concerning teachers' in-service needs along the seven clusters?

To tease out the perceptions of respondents regarding the in-service education needs of teachers; 300 teachers, 60 principals, 45 subject advisors, and 45 inspectors were selected to comprise the sample. To identify the teachers' needs, a forty-six item questionnaire representing varieties of teaching competencies was used. The items were sorted into seven major areas of teaching competencies which are:

1. DPS = Developing Pupil Self.

2. DPES = Developing Personal Self.

3. HCP = Handling Classroom Problems

4. MCI = Managing Classroom Instruction.

5. EAA = Evaluating and Assessing Achievement.

6. II = Individualizing Instruction.

7. PI = Planning Instruction.

The instrument was divided into two parts (see Appendix G). The first part asked the respondents to identify their respective role groups. The second part sought to collect the data necessary to answer the research questions of the study.

Data collected for this study was analyzed by using descriptive statistics (means and standard deviations), and seven one-way analysis of variance tests.

Summary of Major Findings

Findings Regarding Order of Perceived Importance of Needs by all Respondents

All the respondents regarded each of the 46 skills as important for the continuing professional development of practicing secondary school teachers. The mean ratings of all statements were above the mid-point on the five-point scale. These high ratings indicate that black secondary teachers need in-service in virtually all of the selected skill areas. The implication may be that collegiate training was inadequate or had no relation with what actually obtains in the schools.

The five teaching competency skills that were perceived as the most needed of all were the following:

-Utilizing audio-visual equipment and other mechanical aids, i.e. teaching aids.

-Planning teaching activities with other teachers or administrators.

-Skills in providing career guidance.

-Instilling in students the will to learn in their own initiative.

-Keeping abreast of development in one's subject matter area.

The above skill statements seem to suggest that teachers are perceived not to be well-versed in using teaching aids, not to be very knowledgeable in the subject areas that they teach and how to go about teaching them, and lack the skills in the provision of career guidance.

The two statements that received the lowest rating even though above the midpoint were:

-Developing a broad acceptance of self, and

-Coping with the task of assigning marks.

These two skill statements respectively relate to the teachers' ability to develop self-esteem, and that of grading pupils' work.

As far as perceptions of all 46 items by each role group were concerned, the two statements that were rated in the first ten competencies by each of the four role groups were:

-Utilizing audio-visual equipment and other mechanical aids, i.e., teaching aids.

-Planning teaching activities with other teachers or administrators.

The three competency skills rated by each role group in the last five of the 46 skill areas were:

-Making general presentations of information and directions.

-Developing a broad acceptance of self.

-Coping with the task of assigning marks.

Findings Regarding Perception of Needs on the Seven Clusters

All the subjects indicated that teachers need in-service education in all the seven clusters. With regards to the importance and priorities of perceived needs, the clusters were ordered in the following manner: (1) developing pupil self, (2) handling classroom problems, (3) managing classroom instruction, (4) planning instruction, (5) individualizing instruction, (6) evaluating and assessing achievement, and (7) developing personal self.

The above odering showed that the respondents perceived strongest those in-service education needs that focus on the self-esteem of pupils, while they perceived the least the items that deal with the development of the teacher's personal self. Even though this cluster was rated lowest,

it is still needed by the teachers since its mean rating was above the mid point on the five-point scale.

The teachers as a role group ordered the seven clusters almost exactly as all respondents together (see Table 5.9). They perceived the greatest needs in in-service education in competencies related to the development of pupil self, followed by handling classroom problems, managing classroom instruction, planning instruction, evaluating and assessing achievement, individualizing instruction, and lastly developing personal self.

Principals of secondary schools perceived teachers' needs in in-service education stronger than the teachers themselves perceived (see Table 5.10). They seemed to disagree with teachers in the ratings of all clusters except for the lowest. The principals perceived the greatest teachers' needs in competencies related to planning instruction, followed by the area associated with individualizing instruction, and handling classroom problems. Managing classroom instruction, developing pupil self, evaluating and assessing achievement, and developing personal self were ordered last even though they were rated as needed skills.

Subject advisors are in agreement with principals as regards the strongest perception of competency cluster, planning instruction, as well as the ranking of the last two clusters which are: evaluating and assessing achievement, and developing personal self (see Table 5.11). The second

highest ranking was received by the cluster of handling classroom problems (in agreement with teachers), followed by managing classroom instruction, developing pupil self, and individualizing instruction.

The ranking by inspectors seem to be strikingly dissimilar from those of the other three role groups, except on the cluster of developing the teacher's personal self, which they too ranked lowest but as a needed skill. They (inspectors) seemed to be more concerned with competencies that relate to individualized instruction. Competencies related to planning instruction and handling classroom problems were perceived by inspectors as respectively the second and third important areas in which teachers need in-service training. Then followed managing classroom instruction, developing pupil self, and then evaluating and assessing achievement as sixth (see Table 5.12).

Findings Related to Differences in Perceptions of Clusters

In this part findings that resulted from testing the hypotheses are presented. All hypotheses were tested at the .05 level of significance.

H_{o_1}: There are no significant differences in the perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of developing pupil self (DPS) in which teachers have in-service needs.

By testing this hypothesis, results showed that there were no significant differences among the four role groups of respondents regarding their perceptions of teachers' in-service needs along the cluster of developing pupil self. Mean ratings of needs in this cluster of competencies indicated that role group was not an influential factor in perception.

H_{o_2}: There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of developing personal self (DPES) in which teachers have in-service needs.

The above hypothesis was not rejected and showed that there were no significant differences on role groups' perceptions of in-service needs cluster of developing personal self. Role group had no effect on perceptions.

H_{o_3}: There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of handling classroom problems (HCP) in which teachers have in-service needs.

The hypothesis could not be rejected. Respondents' role groups had no effect on their perceptions of in-service education needs along the cluster of handling classroom problems.

H_{o_4}: There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of managing classroom instruction (MCI) in which teachers have in-service needs.

This hypothesis was rejected. It showed that there were significant differences on role groups' perceptions of in-service cluster of managing classroom instruction. This means role group was a factor in perception.

H_{o_5}: There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of evaluating and assessing achievement (EAA) in which teachers have in-service needs.

The hypothesis was not rejected. This indicated that there were no significant differences among the four role groups with regards to their perceptions of in-service needs cluster of evaluating and assessing achievement. Role group was not a factor in perception.

H_{o_6}: There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of individualizing instruction (II) in which teachers have in-service.

This hypothesis was rejected, as significant differences among the role groups' mean ratings were identified in the cluster of individualizing instruction. The mean ratings indicated that inspectors perceived the strongest teachers' needs in this area as compared to the other role groups.

H_{o_7}: There are no significant differences in perceptions of teachers, principals, subject advisors, and inspectors in regard to the cluster of planning instruction (PI) in which teachers have in-service needs.

This hypothesis too, was rejected, indicating that there were significant differences in perceptions by the four role groups along the cluster of planning instruction. The four role groups perceived planning instruction cluster differently. Role group seemed to be a factor in the perceptions of competencies related to this cluster.

Conclusions

This section presents conclusions with respect to the major research questions and hypotheses.

The study revealed that there is an affirmative consensus among the secondary teachers, principals, subject advisors and inspectors in regard to their perceptions of teachers' in-service education needs in teaching skills and competencies that were selected for the purpose of this study. All the four groups of respondents who participated in this research indicated that secondary teachers are in great need for in-service education in all the seven competency clusters.

All respondents, as well as each role group, tended to rank highest the need for skills that deal with guidance, teaching strategies and teaching aids, and keeping abreast in one's subject area. The results are in agreement with the study by Al-Ghamdi (1982), whose results indicated that secondary teachers rated in the first five the competency statement

dealing with the utilization of audio-visual equipment and other mechanical aids. That there is a strong need for development in content may be indicative of ill-qualifications academically and reflective of the type of training teachers received before becoming teachers.

The respondents ranked lowest two statements that deal with the teacher's broad acceptance of self and coping with the task of assigning marks. It may well be that less significance is put to self-esteem of teachers and grading, than on statements that deal directly with the self-esteem of school children.

The responding teachers, principals, subject advisors, and inspectors identified competencies related to developing pupil self as the greatest priority of needs, while they perceived the least needs in competencies associated with the development of the teacher's personal self. This preference to developing pupil self seems to indicate that the respondents are more concerned with problems that interfere with the educational achievement of students, than they are with those problems that affect the teachers themselves.

The four groups seemed to agree on ordering in-service needs in terms of the overall importance of clusters. They tended to differ in the perceptions regarding the degree to which each competency cluster was needed for in-service education of teachers. Generally, subject advisors and

inspectors rated all competencies somewhat higher than did teachers and principals. This may be indicative of the positions held by advisors and inspectors; that of curriculum supervision and oftentimes conducting inspection.

Teachers as a group perceived the greatest needs related to pupils; first, pupil self and how to handle classroom problems. This showsthat classroom discipline (or management) is a serious issue as well. It is apparent that teachers are more concerned about the development of the students in their classroom than their own personal development. The results here show strong agreement with the results of studies by Mubarak (1982) that teachers frequented most in-service activities having topics dealing with the improvement of instructional skills, and by Weber and colleagues (1983) that teachers viewed as most important competencies that deal with the ability to identify learners' emotional, social, physical, and intellectual needs. This is also a striking similarity with results of the study by Grandgenett (1978) that revealed the cluster of developing pupil self seemed to be the greatest in-service need among teachers, followed by handling classroom problems. In contrast, principals and subject advisors viewed planning instruction as the most important cluster. This is an area where they are usually expected to provide teachers with expert guidance.

Other than rating lowest the development of the teacher's personal self as did the other three groups, inspectors appeared to be more concerned with individualized instruction, followed by planning instruction. It may be these emphases reflect the type of problems inspectors encounter in their work with secondary school teachers.

The study yielded some differences among respondents in regard to their perceptions of the teacher's in-service education needs in clusters of managing classroom instruction, individualized instruction and planning instruction. However, the differences were of minimal significance as indicated by mean ratings.

Finally, this study revealed that role group was not a factor in the perceptions of participants regarding in-service needs along the clusters of developing pupil self, developing personal self, handling classroom problems, and evaluating and assessing achievement.

Observations and Reflections

The research data is valid in that it has both face validity and has been used previously as indicated by the literature reviewed. One can never know in the absence of open-ended questions whether unstated needs are present. For anyone replicating the study, open-ended questions may be added so that uncovered in-service needs may surface.

With the use of the Teachers' Needs Assessment Survey, everybody's perception of teachers' in-service needs piled up to the very high, the limitation being that the real needs of teachers are obscured. It would perhaps be better if the rankings were to be forced to be spread out along the five-point Likert scale.

The cluster descriptors of the forty-six items have been perceived differently in three out of seven cases. This has been confirmed by the results of the analysis of variance tests. The significance of this finding underscores that plans for in-service programs should include inputs from those groups that have not been included to date, especially the classroom teachers themselves. The findings of this study would appear to support (1) a rationale for teacher involvement in planning in-service activities, and (2) the several guiding principles that appear in the third chapter of this study (pp. 45-86).

It would be beneficial to the students, teachers and the department to have some of the in-service sessions during parts of the winter and summer vacations. This would not deprive the students of their teachers as is the case when sessions are held during term. Teachers who are expert in special areas are likely to avail themselves during vacations than during a school term when they are mostly committed to their own school and students.

Local colleges of education and universities should be involved in conducting in-service activities on their campuses. Further, they would be able to provide expertise in specialized areas of assessment, diagnosis, prescription, evaluation, follow-up techniques, as well as preparing specialists in staff development.

This involvement should be extended to teachers' organizations, scientific and cultural institutions.

> The end result would be not only an increased knowledge base . . . but, perhaps more importantly, the development of the capacity of institutions of higher education and local education agencies to investigate and understand staff development issues in the future (Howey and Vaughan, 1983, p. 112).

It would be desirable for the department of education to make known in advance its goals and objectives with regard to programs of in-service education. Further, the department may want to create an organizational structure that promotes and facilitates initiation of staff development programs by those served.

When the writer held discussions with the respondents after administering the questionnaire, there was a strong indication that relief is long overdue. The questions most frequently asked were: how soon will the needs you are assessing be met? Are you perhaps bringing some material relief from the U.S.A.?

This yearning can only be understood against the background of the conditions under which black schools operate. About ninety percent of these schools are not electrified. Some of the schools which might use generators are likely to find them so noisy that use of electric-requiring aids becomes impracticable.

Contribution of tax money towards the erection of black schools is currently insignificant. The greater costs of black education (buildings, equipment, books, etc.) have to be borne by the black parent. Most of these parents get salaries far below the poverty level, whilst a significant number is employed. Because of government policy, some of the schools are in areas where modernization cannot even be thought of. To meet some of the needs of the teachers, therefore, would require complete reorganization of living areas, the problems of which are beyond the scope of this study.

Recommendations

Quality instruction is a necessary element in any educational system if a society is striving for excellence in education. Black South Africa is no exception if it is to realize progress in social, economic, technological and political spheres. Excellence in education goes together with quality teachers. In order to have quality teachers

then we need to have quality preservice training, as well as quality in-service programs for the teachers already in service.

On the basis of the results of the study presented, it seems that black secondary school teachers are in great need for in-service training in almost all teaching skills and competencies. One of the objectives of this study was to make recommendations that are pertinent to the improvement of in-service education programs for practicing black secondary school teachers in the RSA, with the hope that such programs will be both more relevant and more meaningful.

In pursuit of the above, the following points are recommended for consideration by the department of education:

1. The department of education should form a forum to consider the discrepancies in perception of the in-service needs of secondary school teachers, principals, subject advisors and inspectors.
2. Individual teaching competency skills and clusters that were highly rated by participants as very important should receive priority attention by departmental personnel responsible for staff development programs.
3. On the face of it rankings most clearly imply what directions teachers' in-service education might take. The needed skills perceived overlap as priority items. Decisions to address these needed skills would appear

to be good decisions. Most importantly, decision-makers should make sure that they involve authentically representation of the teachers themselves in the planning of staff development programs.

Teacher involvement in the planning and implementation of in-service programs is very vital. Evidence has showed that what teachers perceive as mostly pressing needs are not necessarily what administrators perceive as important for the teachers. In-service activities can only be effective when they are geared to the needs of the teachers.

4. Current literature strongly suggests that it is very important to involve in the planning, organizing, and conducting of in-service programs those for whom activities are intended, be they teachers or administrators. As Al-Ghamdi put it

> Research studies on in-service education have indicated that the best in-service practices are those in which the participants have been involved directly with the planning schemes (1982, p. 164).

One set of implications of the findings of this study is supportive of the suggestions that users be involved in planning and decision-making. Perhaps the best way to eradicate wasteful discrepancies between teachers' perceptions and other decisions makers' perceptions might be through involving teachers in the decisions.

5. A system-wide in-service needs assessment survey to be undertaken in order to identify the needs of all teachers or administrators across all school levels. This should be an ongoing process and will allow for continuous refocusing of planning on needs as they emerge.

> A systematic means for information gathering might be the most efficient way to identify needs and enhance planning activities (Evans, 1978, p. 24).

6. A departmental commission for in-service teacher education be instituted to make feasibility studies for the establishment of an in-service center(s) that will be staffed by expert instructors in their field. Members of such a commission to be highly qualified personnel with knowledge of in-service training.
7. The department to consider establishing an administrative committee or council, centrally coordinated by a director of staff development. Such a committee or council to have as members representatives of teachers, principals, subject advisors, inspectorate, rectors, university faculty of education, community, parents, and a person(s) with knowledge of testing and research techniques.

Further research is recommended to:

8. Conduct an extensive evaluation of current in-service activities within the department. This will help in determining the effectiveness of what is afforded teachers presently.
9. Explore the relationship between teacher preparation programs in the colleges of education and universities, and the curricula and insructional practices in the schools.
10. Determine the significance of demographic variables such as age, sex, years of teaching experience, and levels of academic qualifications, in the perception of in-service education needs of secondary school teachers and teachers across all school levels.

APPENDICES

APPENDIX A

COVERING LETTER OF LATEST STATISTICS IN THE DEPARTMENT

APPENDIX A: COVERING LETTER OF LATEST STATISTICS IN THE DEPARTMENT

14/03

MMUSO WA LEBOWA/LEBOWA-REGERINGSDIENS/GOVERNMENT SERVICE

No. ya Tshupetso / Verw. Nr./Ref. No. 29/1/2

DINYAKISISO / NAVRAE/ENQUIRIES: D.E. Motloutsi

No. ya Thelefomo / Tel. Nr./No. Chuenespoort 2331

Telex. Nr./No. 4-27947SA

OFISI YA/KANTOOR VAN DIE/OFFICE OF THE
Department of Education
Private Bag X03
CHUENESPOORT
0745

01 May 1986

Mr Mabu I Mateme
1449c Spartan Village
Michigan State university
East Lansing
Michigan 48823
U.S.A

Dear Mr Mateme

Enclosed herewith please receive the latest statistics for this Department. I apologise the delay in sending the required material, but I hope you will still find it very useful for your Doctoral Research.

Wishing you all the luck in you studies.

Yours sincerely

D.E. Motloutsi
SECRETARY FOR EDUCATION

/JDL

APPENDIX B

DUTY SHEETS OF ADMINISTRATIVE PERSONNEL OF THE DEPARTMENT

APPENDIX B: DUTY SHEETS OF ADMINISTRATIVE PERSONNEL OF THE DEPARTMENT

L.R.C. 14/03

MMUSO WA LEBOWA/LEBOWA-REGERINGSDIENS/GOVERNMENT SERVICE

No. ya Tshupetso
Verw. Nr./Ref. No. 200405/9

DINYAKISISO
NAVRAE/ENQUIRIES: Mashao L.L.

No. ya Theletomo
Tel. Nr./No. Chuenespoort 2331/2/3

OFISI YA/KANTOOR VAN DIE/OFFICE OF THE
Department of Education
Private Bag X03
CHUENESPOORT
0745

Mr M.I. Mateme
P.O. Box 211
JANE FURSE
1085

Dear Sir

1. Your letter dated 1982-07-04 has reference.

2. Attached are duty-sheets i.r.o.:-

   2.1. Inspector of Psychological services.

   2.2. " of Schools.

   2.3. Circuit Inspector

   2.4. Chief Inspector and

   2.5. Education Planner.

SECRETARY FOR EDUCATION

/JDL

DEPARTMENT OF EDUCATION

EDUCATION PLANNER

DUTY SHEET

1. To compile, analyse, and interpret statistics relevant to the development of Education in Lebowa, inter alia:

   (a) Schools - types etc.

   (b) Pupils - grades, ages, etc.

   (c) Staff, Trained and untrained, ages qualifications, senior posts; new posts; salaries.

   (d) Accommodation - classrooms, libraries, laboratories.

   (e) Furniture.

   (f) Other equipment.

   (g) Teaching aids.

   (h) Continuation classes.

   (i) Literacy classes.

   (j) Subjects offered - secondary schools.

   (k) Examination results at all levels - Primary, secondary.

   (l) Control of all returns - Quarterly and annual returns.

   1.1 Projections from statistics.

2. Arrange courses for teachers after consultation with the Chief Inspectors.

   2.1 In-Service Training programme suggested by the Department of Bantu Education.

3. Examinations - (a) Mid-year and promotion examinations - control of;

   (b) Control of all external examinations.

4. Registration of Schools.

5. Introduction of new classes.

6. Introduction of new curricula.

7. Inspection reports - summarising for guidance of Chief Inspectors on both professional and administrative aspects; extracting statistics, and attending to urgent requirements emanating from reports.

2/...

MEMORANTAMO
MINUTE

13/15

MMUŠO WA LEBOWA / LEBOWA-REGERINGSDIENS / GOVERNMENT SERVICE

No. ya Tshupetšo
Verw. Nr. Ref. No.

Dinyakišišo:
Navrae, Enquiries:

No. ya Thelefomo/Tel. No.

Die The .....

.....

.....

OFISI YA
KANTOOR VAN DIE
OFFICE OF THE

.....

.....

10/8/82

Duties of the Chief Inspector.

1. To give guidance to Circuit inspectors.
2. To supervise all the work done by circuit inspectors
3. To steady the professional needs in the circuits.
4. To make recommendations to the Secretary.
5. To carry out any other duties required of him by the director.
6. Chief Inspector may request Circuit Inspector to perform other duties relevant to education.

CIRCUIT INSPECTOR

monthly meetings.

A. DUTIES:

1. Head of the Circuit, in charge of all educational matters in the circuit, including adult education.
2. Supervision and control of the staff on the Circuit establishment: Inspector of ~~Education~~ School and clerks.
3. Inspection of all schools and related matters, speci= ally in charge of secondary schools - post primary.
4. Report on inspections and panel inspections.
5. Controls inspection reports of Inspector of schools whom he supervises.
6. Allocation of examination numbers.
7. Interviews with principals, pupils, school committees and others.
8. Meetings with school committee, teachers, tribal authorities, etc.
9. Investigates on misconduct, school funds etc.
10. Conducts courses,
11. Moderates examination question papers, runs internal promotion examinations.
12. Supervises the work of clerical staff and makes a report thereof - bimonthly, quarterly and merit.
13. Attends to correspondence in connection with duties.
14. Advise Chief Inspector on educational matters and educational tendencies in the circuit.
15. Attends conferences.
16. Assists with the election of school committee and nominations.
17. Office administration.
18. Plans and approves itineraries of Inspectors of schools.
19. Recommends leave of Inspectors of schools and principals of schools.
20. Staff development.
21. Self development.
22. Any other duties required of him by the Chief Inspector.
23. Recommends registration of all schools (primary, post primary, literacy and continuation class) and additional classes, and controls their curricula.
24. Recommends appointment of all teachers.
25. Controls all supplies to circuit offices.
26. Makes a close study of the regulations.
27. Draws up a year programme.

2/

INSPECTOR OF SCHOOLS

B. DUTIES:

1. Gives professional guidance to primary schools and teachers.
2. Inspects primary schools. May be invited to inspect post primary schools.
3. Compiles inspection reports.
4. Conducts S.A.T.B. tests.
5. Assists with election of School Committees.
6. Conducts refresher courses for teaching staff.
7. Attends school functions, principal's meetings, school committee's meetings, etc.
8. Moderates examination question papers.
9. Compiles and submits monthly reports to Circuit Inspectors.
10. Inspects school funds and reports on his findings
11. Advices the Circuit Inspector on professional matters.
12. Any other duties required of him by the Circuit Inspector.
13. Staff Development
- X 14. Self Development.

X Annual parents' meetings.
" " Days.

Clerks { Control the work of Juniors.
Letter to clerks concerning post. Place post in files.
Opening of post (Both Grades) & Opening & closing of files (Grade II clerk)

DUTY SHEET

INSPECTOR OF EDUCATION: PSYCHOLOGICAL SERVICES

1. The planning, control and supervision of all activities in the Psychological Services Section of Education.

2. Liaise with several divisions of the Department of Education and with other institutions such as the Human Sciences Research Council - to determine needs and to keep abreast of developments in the field of Psychological Services in the other Education Departments e.g. Department of Education & Training.

3. Liaise with Chief Inspectors, Directors of Education, the Secretary and Inspectors of Education in order to propagate Psychological tests as an Educational aids.

4. Delegate duties to Psychological test officers.

5. Organize new testing programmes in conjunction with the Human Sciences Research Council in order to develop new testing programmes and revise the existing ones.

6. Make recommendations regarding programmes to upgrade and improve Education and to eliminate retarding factors.

7. Control the ordering, safe-keeping and mailing of all material required for Psychological testing and the administrative documents of the Psychological Services.

8. Responsible for the planning and budgeting of expenditure for the Psychological Services Division.

9. Organize and run inservice-training courses for the Psychological Test Officer and Guidance Teachers..

10. Responsible for the planning and control of Guidance as a school subject.

APPENDIX C

LETTER ASKING FOR PERMISSION TO CONDUCT RESEARCH

APPENDIX C: LETTER ASKING FOR PERMISSION TO CONDUCT RESEARCH

Tel: (517) 355-1238

1449C Spartan Village
Michigan State University
East Lansing
Michigan 48823

November 7, 1983

The Secretary
Department of Education
Private Bag X03
CHUENESPOORT
0745
REPUBLIC OF SOUTH AFRICA

Dear Sir:

Doctoral Research in Educational Administration, Curriculum and Instruction, July-August 1984.

The above matter has reference;

Pursuant to our discussion of August 9, 1983, am hereby making a formal application for permission to conduct research with the staffs of each of the 15 circuits of education (Inspectors of education and of schools, and subject advisors), principals and teachers of secondary schools.

1. Research topic:

"A study to determine In-Service needs of black secondary school teachers of Lebowa department of education in the Republic of South Africa with a view to the improvement of the In-Service curriculum"

2. Purpose of study:

This study has a two-fold purpose;

(a) To identify teaching competencies in which selected teachers, principals, subject advisors, and inspectors perceive needs for In-Service education.

(b) To identify significant differences in the perceptions of In-Service education needs among teachers, principals, subject advisors, and inspectors.

3. Respondents:

(a) Teachers and principals.

All secondary schools under the Lebowa department of education will be grouped into 15 clusters according to the number of circuits in the region. In each cluster, 5 schools will be randomly selected. 10 teachers in each of the randomly selected schools will be included, making a total of 750 teachers.

(b) Subject advisors.

All the 45 subject advisors in the 15 circuits will be included in the population of respondents.

(c) Inspectors.

All the inspectors of education and of schools will be expected to form part of the respondents. The projected number of inspectors is 45.

Breakdown:

Teachers	=	750
Principals	=	75
Subject Advisors	=	45
Inspectors	=	45
Total	=	915

4. Nature of involvement and dates:

The respondents will be asked to complete a questionnaire. Approximate time for the completion of the questionnaire is 40 minutes. The month of July and first two weeks of August, 1984 are earmarked for this research project.

It is the researcher's personal preference to conduct the research during school and office hours because,

(a) it is both convenient and economic in terms of time constraints, and
(b) infringement upon the respondents' personal time should be avoided.

5. Instrumentation.

A three part questionnaire will be used for collecting data for this exploratory study.

The first part will consist of a set of questions designed to collect demographic and personal data about the respondents.

The second part includes the Teacher Needs Assessment Survey instrument. It will consist of 43 items based on the instrument developed by Gary M. Ingersoll in 1975 at Indiana University to "provide a reliable and convenient format through which a variety of school systems could gather data on In-Service needs and use that data to augment inservice planning."

The third part will include open-ended questions designed to elicitresponses about issues related to inservice programmes.

6. Analysis and Interpretation:

The statistical analyses of the data to be utilized will be;

(a) factor analysis technique to identify clusters of items that will be rated similarly by respondents.

(b) determining the mean and standard deviation for each cluster of items for each role group of respondents.

(c) Analysis of variance (ANOUA) on mean ratings of each cluster of items for all four role groups to identify significant differences in the perceived needs for inservice programmes.

On the basis of the findings the researcher will discuss their implications and make recommendations.

7. Significance of the study:

It is hoped the study will serve several purposes;

(a) It may provide useful data on areas of teaching competencies in which In-Service education is perceived as necessary, and also to be used as a basis in planning In-Service education programmes for teachers in the Lebowa Education Department and other education departments in the Republic of South Africa.

(b) Such identified areas of teaching competencies could be beneficial in priortizing In-Service activities.

(c) The findings may be used by the educational planners to examine the degree to which actual and projected In-Service education programmes correspond to the perceived needs.

(d) The study may contribute towards effective programmes of In-Service education for teachers so as to provide improved educational opportunities for students.

(e) finally, it is intended the researcher will make recommendations that are pertinent to the improvement of In-Service education for practicing school teachers in the Lebowa Department of Education, and the South African black edcuation as a whole.

8. Correspondence with Inspectors of Education:

(a) A request is made to you for a letter authorizing me to correspond directly with the circuits to make arrangements for time with them, subject advisors, and the schools that I have selected. You will recall that your office has already supplied me with names and addresses of all circuits and secondary schools falling within your department.

(b) Since your office has already furnished me (August 19, 1982) with duty-sheets in respect of inspector of psychological services, inspector of schools, circuit inspector, chief inspector, and education planners, I will be very appreciative if you could send me the duty-sheets of the newly-appointed subject advisors, at your earliest convenient time.

(c) I also would want to know the date the secondary schools will re-open for the third quarter in July 1984.

Looking forward to a response at your earliest convenient time, with the hope that this letter will meet your favorable consideration.

Yours sincerely,

Mateme

Mabu I. Mateme

APPENDIX D

COVERING LETTER BY COMMITTEE CHAIRMAN

APPENDIX D: COVERING LETTER BY COMMITTEE CHAIRMAN

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION • DEPARTMENT OF TEACHER EDUCATION EAST LANSING • MICHIGAN • 48824-1034

November 7, 1983

The Secretary
Department of Education
Private Bag X03
CHUENESPOORT
0745
REPUBLIC OF SOUTH AFRICA

Dear Sir:

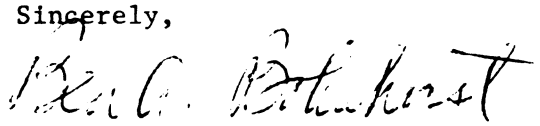
This letter is to certify and to verify that Mr. Mabu I. Mateme is a candidate for the doctor's degree in our university and that I serve as his advisor and chairperson of his doctoral advisory committee.

Mr. Mateme is pursuing very successfully a planned program of studies leading to research which he intends to carry out in South Africa.

He has been a member of several of my graduate classes, so that I know his capacities very well. He is an outstanding student and will be a credit to our university upon the completion of his program.

I, therefore, heartily recommend him to you for favorable consideration and hope that your department may assist him in his research endeavors.

Sincerely,



Ben A. Bohnhorst
Academic Advisor

BAB/dz

APPENDIX E

PERMISSION TO CONDUCT RESEARCH

APPENDIX E: PERMISSION TO CONDUCT RESEARCH

14/03

MMUSO WA LEBOWA/LEBOWA-REGERINGSDIENS/GOVERNMENT SERVICE

No. ya Tshupetso
Verw. Nr./Ref. No. 29/1/2

DINY AKISISO
NAVRAE/ENQUIRIES: Gwangwa M.E.

No. ya Thelefomo
Tel. Nr./No. Chuenespoort 2331

Telex. Nr./No. 4-27947 SA

OFISI YA/KANTOOR VAN DIE/OFFICE OF THE
Department of Education
Private Bag X03
CHUENESPOORT
0745

0 1 MAY 1984

Mabu I. Mateme
1449C Spartan Village
Michigan State University
East Lansing
Michigan
48823
U.S.A.

PERMISSION FOR DOCTORAL RESEARCH IN OUR DEPARTMENT MR M.I. MATEME

You are kindly informed that your request to do doctoral research in our department is approved.

We apologise the delay of your application.

Wishing you all the luck in your studies.

Your co-operation in this matter is highly appreciated.

SECRETARY FOR EDUCATION

/CPS

APPENDIX F

LETTER OF TRANSMITTAL

APPENDIX F: LETTER OF TRANSMITTAL

1449 C. Spartan Village
Michigan State University
East Lansing
MI 48823
U.S.A.
June, 1984

Dear Colleague;

The survey you are about to complete is part of a research project designed to assess the in-service needs of secondary school teachers for instructional skills and competencies. The results are intended for use in planning staff development activities for teachers in the department of education.

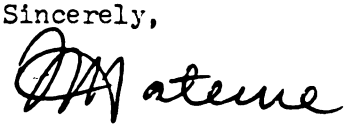
I wish to thank you in advance for your time and cooperation in completing this questionnaire.

Kindly respond to all items as accurately and truthfully as possible. Your expressed perceptions of teachers needs will hopefully contribute to the foundation for future in-service activities. You may read the copy of the final report if you so wish.

In addition, please be advised that your participation and responses will be held in complete anonymity.

Again, thank you for your time and effort.

Sincerely,



Mabu Isaac Mateme
College of Education
Michigan State University

Dr. B.A. Bohnhorst
Doctoral Committee Chairman

APPENDIX G

DIRECTIONS TO RESPONDENTS AND THE QUESTIONNAIRE

APPENDIX G: DIRECTIONS TO RESPONDENTS AND THE QUESTIONNAIRE

INSTRUCTIONS

There are 46 statements on the questionnaire that represent generally accepted areas of teaching skills or competencies. Teachers need in-service training in some of these skills, while they may not need to be in-serviced in some of the skill areas.

Please indicate how much of a need teachers have for in-service training by circling one of the five alternatives. The alternatives have the following meanings:

1 = SA, meaning I Strongly Agree there is a teachers' need for in-service training in this area.

2 = A, meaning I Agree there is a teachers' need for in-service training in this area.

3 = N, meaning I am Neutral there is a teachers' need for in-service training in this area.

4 = D, meaning I Disagree there is a teachers' need for in-service training in this area.

5 = SD, meaning I Strongly Disagree there is a teachers' need for in-service training in this area.

If you strongly disagree with the statement you would circle "5".

EXAMPLE:

	Strongly Agree (SA)	Agree (A)	Neutral (N)	Disagree (D)	Strongly Disagree (SD)
Teachers have a need for in-service training in: Identifying gifted and talented students.	1	2	3	4	(5)

TO TEACHERS:

Please circle the alternative to the statement you believe best expresses your need for in-service training.

TO PRINCIPALS, SUBJECT ADVISORS, AND INSPECTORS:

Please circle the alternative to the statement you believe best expresses your perception of the teachers' need for in-service training.

PLEASE INDICATE YOUR ROLE GROUP (X)

Teacher ▱

Principal ▱

Subject Advisor ▱

Inspector ▱

TEACHER NEEDS ASSESSMENT SURVEY

Teachers have a need for in-service training in:	SA	A	N	D	SD
1. Practical details of recently introduced schemes of work and daily preparation of lessons.	1	2	3	4	5
2. Using questioning procedures to promote discussion.	1	2	3	4	5
3. Constructing and using tests for evaluating academic progress.	1	2	3	4	5
4. Accepting teacher's personal responsibilities.	1	2	3	4	5
5. Useful methods of classroom discipline and how to use them.	1	2	3	4	5
6. Knowing where to refer student problems beyond those which can be handled by the teacher.	1	2	3	4	5
7. Managing classroom affairs to obtain maximum benefit from supervising aides, subject advisors, etc.	1	2	3	4	5
8. Diagnosing basic learning difficulties.	1	2	3	4	5
9. Creating useful remedial materials.	1	2	3	4	5
10. Developing a capacity for accepting the feelings of others.	1	2	3	4	5
11. Methods of dealing with large classes of varied abilities with little equipment or space.	1	2	3	4	5
12. Constructively using evaluation in helping students' progress.	1	2	3	4	5
13. Developing a broad acceptance of self.	1	2	3	4	5
14. Counseling and conferring with students.	1	2	3	4	5
15. Selecting and developing materials and activities which are appropriate for individualizing instruction.	1	2	3	4	5

		SA	A	N	D	SD
16.	Facilitating development of pupil responsibility.	1	2	3	4	5
17.	Arranging the physical environment (seating arrangements in class, charts, etc.).	1	2	3	4	5
18.	Implementing individualized instruction.	1	2	3	4	5
19.	Developing or modifying teaching procedures to suit own strengths.	1	2	3	4	5
20.	Coping with the task of assigning marks.	1	2	3	4	5
21.	Establishing appropriate standards of performance for students.	1	2	3	4	5
22.	Facilitating social interaction among pupils.	1	2	3	4	5
23.	Involving students in self-evaluation.	1	2	3	4	5
24.	Planning teaching activities with other teachers or administrators.	1	2	3	4	5
25.	Making general presentations of information and directions.	1	2	3	4	5
26.	Keeping abreast of developments in one's subject matter area.	1	2	3	4	5
27.	Instilling in students the will to learn in their own initiative.	1	2	3	4	5
28.	Acceptable methods of handling disruptive students.	1	2	3	4	5
29.	Deciding on appropriate pupil grouping procedures for teaching.	1	2	3	4	5
30.	Identifying student attitudes in order to better relate to student problems.	1	2	3	4	5
31.	Providing for motivation and reinforcement.	1	2	3	4	5
32.	Evaluating a lesson and the preparation of a lesson.	1	2	3	4	5
33.	Identifying student disabilities that need referral or special remedial work.	1	2	3	4	5

		SA	A	N	D	SD
34.	Effectively maintaining classroom control without threatening or terrorizing students.	1	2	3	4	5
35.	Facilitating pupil self-concept and feelings of self-worth.	1	2	3	4	5
36.	Deciding what teaching technique is best for a particular intended outcome.	1	2	3	4	5
37.	Utilizing audio-visual equipment and other mechanical aids, i.e. teaching aids.	1	2	3	4	5
38.	Communicating with and interacting with parents.	1	2	3	4	5
39.	Selecting and specifying performance goals and objectives.	1	2	3	4	5
40.	Gearing instruction towards problem-solving.	1	2	3	4	5
41.	Skills in providing for the individual differences among students.	1	2	3	4	5
42.	Developing a teacher's personal self evaluation method.	1	2	3	4	5
43.	Maintaining professional relationships with other teachers.	1	2	3	4	5
44.	Stimulating growth of pupil attitudes and values.	1	2	3	4	5
45.	Skills in providing career guidance.	1	2	3	4	5
46.	Methods of improving class attendance or reducing absenteeism.	1	2	3	4	5

THE END

Thank you very much for your time and cooperation.

APPENDIX H

RATIONALE FOR THE ADDITIONAL ITEMS ON THE QUESTIONNAIRE

APPENDIX H: RATIONALE FOR THE ADDITIONAL ITEMS ON THE QUESTIONNAIRE

The items added were:

Item	Competency Statement
1	Practical details of recently introduced schemes of work and daily preparation of lessons.
11	Methods of dealing with large classes of varied abilities with little equipment or space.
28	Acceptable methods of handling disruptive students.
41	Skills in providing for the individual differences among students.
45	Skills in providing career guidance.
46	Methods of improving class attendance or reducing absenteeism.

The reasons for adding the above items were:

1. Schemes of work and daily preparations are required of every teacher, and skills in these areas are needed if they (teachers) are to be more effective. (For Item 1.)

2. Abnormal teacher-pupil ratio and individual differences are pertinent issues. These two need to be addressed. (For Items 11 and 41.)

3. Guidance has just been introduced in black schools and many teachers are not knowledgeable about this. (For Item 45.)

4. Classroom discipline and absenteeism are perennial problems that plague our schools. (For Items 28 and 46.)

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