TRAINING FOR CHANGE:

AN EVALUATIVE STUDY OF IN-SERVICE

PRIMARY TEACHER EDUCATION IN MALAWI

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FELIX G. MTUNDA

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FELIX G. MTUNDA

A thesis submitted to the Faculty of Graduate Studies of
the University of Manitoba in partial fulfillment of the requirements
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ABSTRACT

Through the use of the mail questionnaire survey, the research obtained data from 145 trainees who graduated from the MALAWI INSTITUTE OF EDUCATION - BRANDON UNIVERSITY TEACHER IN-SERVICE PROGRAMME in 1986 and 1987. The participants were School Heads and Inspectors in the Malawian primary education system. The primary purpose of the inquiry was to evaluate the trainees' perceptions of satisfaction with the training they had received. This research goal was also a weakness of the investigation because feelings of satisfaction may not be good indicators of programme efectiveness. The construct "satisfaction" was defined in the study as achievement of knowledge and skills, job-performance, acquisition of administrative skills, improved collegiality in the workplace, recognition-support, feelings of personal growth, and economic advancement. These dimensions were primarily obtained from the works of Herzberg, Maslow, and other research studies. However, a further purpose of the research activity was to determine whether any selected biographical elements of the graduates were significant in influencing their perceptions of the programme.

The scope of the study was defined within the framework of this set of questions:

1.   (a) To what degree are the graduates satisfied with the in-service training programme that they received at the Malawi Institute of Education at Domasi?   (b) What is the

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participants' ranking of satisfaction along the following dimensions? (i) Achievement of academic knowledge and technical skills; (ii) Job-performance; (iii) Administrative; (iv) Collegial; (v) Recognition-support; (vi) Personal; and (vii) Economic. (c) For each dimension, which areas reveal a relatively high and low degree of satisfaction?

2. Are there any differences in levels of satisfaction between: (a) The first graduates who completed the in-service training programme in 1986 and the second graduates who finished in 1987? (b) Heads and Inspectors? (c) Heads of urban, model, and rural schools? (d) Heads of large schools and Heads of small schools (e) Male and female graduates? (f) Older and younger graduates?

3. To what extent are the graduates involved in operating in-service training programmes for the teachers in the school system?

In addition to the mail questionnaire which the above research questions suggest, an interview schedule was also used to obtain data from a sample of 8 primary school teachers who worked under the trained school Heads. They were included in the study in order to obtain another perspective regarding the performance of the trained Heads in the school system. The sample of the teachers was acknowledged as a further limitation of the inquiry. The other weakness of the study was the researcher's failure to obtain indirect data regarding the

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performance of the trained School Inspectors also.

Of the 145 trainees who were involved in the inquiry, 114 completed and returned the questionnaires. This represented a return rate of 79%, which was well above the recommended return rate of 70%. The data were then analyzed according to the questions the research addressed and they were reported in the form of tables known as descriptive statistics.

On the basis of thefindings of the case study, the followingconclusions seemed warranted: (1) The graduates of the MIE-BU Teacher Programme reported that they were highly satisfied with the in-service; (2) The participants were most satisfied with all the pre-determined elements of satisfaction, except the economic dimension; (3) The clients were happy with all the sub-variables of satisfaction, except thefollowing: coverage of academic content related to primary education in Malawi, relations with their supervisors in the school system, their personal comfort, their level of involvement in general policy-making, relations with the community, and everything under the economic dimension; (4) There were no notable differences in levels of satisfaction between the various categories of the research participants; (5) There was evidence of horizontal transfer of in-service ideas to the participants' home environment, a point which is consistent with the goals of the training programme; (6) Finally, it was also concluded that the implementation strategy of the MIE-BU Teacher Project, which

continues to operate in Malawi, is consistent with the research literature on in-service education. The literature emphasizes that staff development activities should call attention to context, assessment, content, and process. The above programme continues to give attention to these important factors.

In view of the major findings and conclusions of this study, several recommendations were made in order to further improve the impact of the in-service training programme in Malawi.

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INTRODUCTION

PURPOSE OF THE STUDY

The newly-instituted Educational Development Plan: 1985-1995
for the Republic of Malawi calls for significant changes at all
the 3 levels of formal education, namely: primary,   secondary,
and tertiary level of education.   The changes are focused on   the
organization   of   the   entire   educational   machinery,   and   the
development   and   utilization   of   both   the   human   and physical
resources.   This intention is clearly defined   in   the   following
statement that covers the scope of the plan:

> The   second educational development plan is intended to
> cover the period 1985 to 1995.   Its   overall   objective
> is the consolidation of policy so that a proper balance
> is maintained in   the   levels   of   physical   and   human
> resources   allocated   to   all   levels   of the education
> system and with special attention being given   to: (i)
> the   equalization   of educational opportunity; (ii) the
> promotion   of   efficiency   in   the   system;   (iii)   the
> improvement   of   physical and human resources; (iv) the
> judicious use of limited resources (Malawi Ministry   of
> Education and Culture. 1985; p. 2).

Thus, one of the significant   implementation   strategies   of   the
above plan was   the   installation   of   the   MALAWI   INSTITUTE   OF
EDUCATION   -   BRANDON   UNIVERSITY   TEACHER   IN-SERVICE PROJECT in
1984.   Although   the   project   commenced a year earlier than the
official date of the implementation of the plan, it can be argued

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that plans have a past, a present, and a future. Thus, the project was established during the planning period.

The MIE-BU project has been operational since 1984 and it continues to operate to the present day. The programme is given to selected primary school administrators and educational supervisors participating in the educational process of the children of Malawi. In the above year, 90 trainees consisting of School Heads and Inspectors of primary schools enrolled in the in-service programme. In the following year, 1985, 60 more candidates, similar in positions as the above group, were admitted to the training programme, thereby bringing the total number of participants to 150. The training lasts for 24 weeks spread over a period of 3 years. There are 3 residential sessions held at the Malawi Institute of Education at Domasi. Each residential session has a duration of 8 weeks. Thus, there is one residential session at the beginning of the programme; there is a second one in the middle; and a third at the end. The first group of trainees graduated in 1986, and the second in 1987. Thus, the primary purpose of this study was, through gathering data from the 1986 and 1987 graduates, to analyse and evaluate the level of participants' satisfaction with their in-service training. A further purpose was to determine whether any selected biographical or demographic characteristics of the in-service graduates were significant factors in their perceptions of the programme.

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A BRIEF BACKGROUND OF THE STUDY

It should be mentioned that terms that are specific to Malawian education and have been used in this research, have been defined in Appendix A.

Malawi was the one-time British Protectorate of Nyasaland from 1891-1953, when it became a part of the Federation of Northern Rhodesia (Zambia), Southern Rhodesia (Zimbabwe), and Nyasaland. The federation was dissolved in 1963 and in 1964, Malawi gained independence from Great Britain. Two years later, Malawi became a Republic within the Commonwealth.

The country's attainment of independence meant, among other things, that Malawi had to address itself to the challenges of both old and new problems of educational development. Some of these problems have become more serious over the years since the country's achievement of independence in 1964. However, the Government of Malawi, like many other governments of new nations in Africa, has played an active role in addressing problems of educational development. For example, Malawi's Educational Development Plan: 1973-1980 expressed the following educational intentions (Malewezi, 1988; p. 458):

1.) To base educational development, particularly beyond the primary level, on the personnel requirements of social and economic development.

2.) To make the system more relevant to socioeconomic needs.

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3.) To ensure the maximum and efficient utilization of existing facilities and resource inputs.

4.) To secure a more equitable distribution of educational facilities and resources in order to realize the greatest possible cost effectiveness in the education sector.

The present ten-year educational plan for the period 1985-1995 has similar goals (Malawi Ministry of Education and Culture, 1985a: p.4):

1.) To support and serve the precepts and cornerstones of the Republic of Malawi in a spirit of unswerving loyalty and dedication.

2.) To uphold the ethical integrities and socio-cultural traditions accepted in the nation.

3.) To support with utmost vigor the maintenance of national self-sufficiency in food production and the increase of agricultural productivity for export purposes.

4.) To provide a broadly based well-rounded education programme for personal advancement as well as the development of the nation's human resources.

5.) To provide the opportunity for the present generation of children to achieve permanent literacy, numeracy, ethical and social-economic knowledge as well as skills.

These policy statements have guided Malawi in making some practical achievements in its educational development. The educational system in existence at independence was not adequately suited to meet Malawi's developmental goals (Banya, 1988; Malawi Institute of Education, et al., 1988). The colonial

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educational system suited the needs of the colonial government and was geared to preparing students to become church leaders or preachers, primary school teachers, clerks and other types of occupations that the colonial civil service thought necessary (Banya, 1988; Malawi Institute of Education, et al, 1987). Since only a small percentage of the population was required for these purposes, there were very few primary and secondary schools to accommodate the many who wanted that type of education (Banya, 1988). The following report provides further evidence of the situation as it existed:

> The missions came to Malawi to spread the gospel and the benefits of civilized western life. The first schools therefore taught reading in the vernacular as a means of access to the scriptures and salvation; writing as an art complementary to reading; simple computational skills as a necessity for modern civilized living; and physical education, usually in the form of drill, to foster a sense of discipline. The Phelps-Stokes Commission (1924) commented: "The main object of their schools is to instil a thorough knowledge of the Word of God into the minds of scholars old and young, and to raise a Bible-reading people. This fact will explain some of the procedures adopted in the mission schools." Pupils who showed interest and academic promise might be trained to set up denominational schools of their own, while the less promising were taught practical subjects. As long as the missions financed the bulk of education they called the tune, with government seeking to co-ordinate educational effort and encourage better standards of building, equipment and teaching: and standards were often abysmally low when missions competing with each other for influence in a locality spread their resources thinly (Cameron and Hurst, 1983; p. 235).

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The attainment of independence in 1964 fueled the demand for people who could participate in the country's economic development. This charged the demands for schooling. More primary schools were constructed and student enrollment increased rapidly during 1964-1987 by 184% (Malawi Ministry of Education and Culture, 1987). Kurian (1987) reports that by 1984, there were 2340 primary schools in the country. It would be interesting to compare the number of primary schools in 1984 with those at independence in 1964, but the figures are not available. However, the number of primary schools in Malawi is now estimated at 2500 (Palmer, 1989).

The number of secondary schools also increased since independence. At independence, there were only 4 secondary schools in the whole country as opposed to 58 in 1984 (Kurian, 1987). Although figures are not available, this number has increased since then, with increased support from the World Bank. In the 1986/87 academic year, it was reported that secondary school enrollments had increased by 332% since independence (Malawi Ministry of Education and Culture, 1987).

The year, 1966, saw the establishment of the Malawi College of Distance Education with its associated night secondary schools in order to cater to the aspirations of those who could not be selected into day secondary schools (Agnew and Stubbs, 1972).

Another milestone in Malawi's educational development was the creation of the University of Malawi in 1965 (Agnew and

Stubbs, 1972). The University awards degrees and diplomas in teaching, engineering, business studies, agriculture, nursing, law and the social sciences. The University enrollments have increased by over 1109% since independence (Malawi Ministry of Education and Culture, 1987).

Curriculum reform was also a post-independence priority. As already pointed out by Cameron and Hurst (1983), the educational process during the colonial era was dominated by missionaries whose primary interests were to teach the gospel and to introduce aspects of western civilization. Therefore, they taught reading, writing, counting, and physical education skills. The academically oriented students were provided with some form of teacher preparation so that they could start their own mission schools. The ultimate motive was to spread the Word of God. This type of education was not adequate to meet the socio-economic needs of a young nation. Therefore, along with the expansion of the educational system after independence in 1964, the following curricular changes were made: Chichewa and agriculture were introduced as compulsory subjects in the primary, secondary, and teacher training colleges; science was introduced in both the primary and teacher training colleges; English, which was previously taught from standard 5 above, had to be taught from standard 1; the content of arithmetic in the primary schools and the teachers' colleges underwent revision;

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technical subjects were introduced in selected primary and secondary schools, and in all the teachers' colleges.

Other educational developments that have taken place in Malawi during the post-independence period include: the establishment of a Planning Unit within the Ministry of Education Headquarters to facilitate systematic development of education (Brimer and Pauli, 1971); the development of the Malawi Institute of Education in 1982 in order to carry out and co-ordinate curriculum development activities, conduct research, and in-service training for the professionals in the education system; the construction of more primary teacher training colleges to cope with increased student enrollments in the primary schools (Setidisho, 1988); and the introduction of radio programmes to support primary teacher upgrading. These are some of the examples of the educational changes that have taken place since the country's independence in 1964.

However, despite these impressive educational achievements, there remain many educational problems, some of them serious, especially in the primary school system. Unless something is done about these problems soon, they may well retard educational development.

Malawi's main problem in the primary school system relates to curriculum implementation. The reader is advised that the following list of problems affecting curriculum implementation in

Malawi receives detailed treatment in the next chapter of

the study. First, qualified and trained teachers are in short

supply (Malawi Ministry of Education and Culture, 1987); and thus

a significant proportion of all the teachers participating in the

primary school system are underqualified, under-trained or

untrained according to the definitions of the Malawi Ministry of

Education. The characteristics of the teachers in the primary

schools are well reported by Palmer (1989) who states:

> The meteoric expansion of the Primary Education System
> and the shortfall in the annual outputs of the existing
> Teachers' Colleges have forced the Government to employ
> temporary underqualified teachers. With almost 1800
> underqualified and undertrained primary teachers and a
> further 1800 teachers whose basic education is itself
> only at the primary level ...(Palmer, 1989; p. 2).

Second, classrooms to contain the rising pupil enrollments are

inadequate and therefore, over-crowding in the lower classes as

well as in the examination classes is not uncommon (Setidisho,

1988; Malawi Ministry of Education and Culture, 1987). Third,

the curriculum is also known to be problematic, in part because

it is not relevant to Malawi's developmental goals (Malawi

Institute of Education, et al., 1987). Fourth, school

resources in the form of text-books, guides or handbooks and

teaching-learning aids to ensure the effective implementation of

the officially prescribed curriculum are lacking or inadequate

(Heyneman, 1980; Malawi Ministry of Education and Culture, 1987).

Fifth, the primary school administrators and supervisors are ill-

equipped to perform their expected functions since they have not had any prior training in school administration, inspection and supervision and, therefore, both the leadership and the advisory functions have not been conducted effectively (Halamandaris, et al., 1983). These factors are known to contribute to low educational achievement in the countries of the developing world (Fuller, 1987; Fuller, 1986; Kogoe, 1986; Heyneman and Loxley, 1983; Carnoy, et al., 1982; Dubbeldams, 1982; Inkeles, 1982; Postlethwaite, 1982; The World Bank, 1980; Levy, 1971; and Tibbetts, et al., 1968). Although these studies and especially those reported by the staff of the World Bank (Heyneman, 1976; 1980a; 1980b, Moock and Horn, 1983) focus on the view that the in-school factors are the chief determinants of student achievement in the developing nations of the world, it should be kept in mind that the factor of student social background is equally important in influencing learning performance among the children in the developing countries. For example, Ezewu (1983) notes that the students from well-to-do families in Africa are at a greater advantage over their counterparts from the poor African families in such areas that affect formal schooling as: early school attendance, attendance at the best schools available, and provision of a psychologically supportive home environment. These observations are further supported by research findings obtained from both Nigeria and Kenya.

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Obanya and Ezewu (1981) undertook a study in Nigeria which disclosed that students from the socio-economically well-to-do backgrounds finished their primary education much earlier than those from the poor families. The students from the better family settings, in terms of socio-economic status, completed their primary schooling between the ages of 10 and 11, whereas those from the less well-to-do finished between the ages of 12, 13 and even 14. The former students finished earlier than the latter category because their families attached great value to education and, therefore, they sent their wards to primary institutions at an earlier age, they bought books and other school-related materials for their children, and they encouraged their children to develop interest in school-related activities. On the other hand, the children from the poor families received less support in these essential. areas (Obanya and Ezewu, 1981). Therefore, they completed primary schooling later than their colleagues.

In Kenya, Prewitt (1980) noted that wealthier and better educated Kenyans sent their children to private nursery schools in order to prepare them for formal primary schooling which the poor Kenyans could not afford. What this means is that children from families with a high socio-economic status are more adequately prepared for formal schooling than those from families that are low on the socio-economic status scale. Consequently, such children who are provided with early learning experiences

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are more ready to learn when brought into a formal school setting than those who missed such experiences.

The above findings can be generalized to many developing countries in Africa, including Malawi. Therefore, in discussing issues that affect student progress in the developing areas of the world, it is important to include in such discussions both the internal and external influences of schooling. In fact, the external factors, such as a student's social background, work complementary with the internal factors of schooling. Therefore, the combined effect of both the external and internal conditions of schooling has an impact on childrens' learning in the primary schools of Malawi. Education officials in Malawi have expressed considerable concern over the quality of primary schooling in the country (Setidisho, 1988; Malawi Institute of Education, et al., 1987). For example, at one of the closing ceremonies of the MIE-BU Teacher Project, the top-most civil servant in the Malawi Ministry of Education and Culture had this to say:

> The importance of this course, or indeed of any course
> of this type, cannot be over emphasized. The cry for
> all of us is the total improvement of the quality of
> education in this country. We say improvement of
> quality because there is something lacking; the
> standards are low and they need to be uplifted...
> (Malawi Institute of Education, 1985; p. 14).

Standards of student learning performance are low. This is known, among other things, to cause high repetition and drop-out

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rates. It is estimated that 55% of the pupils drop-out by the beginning of standard 4 (Halamandaris, et al., 1983). This leads to wastage of talent and financial resources. Wastage of talent in the form of high repetition and drop-out rates reduces the number of youth participating in the school system. High repetition especially in the Standard 8 examination classes, further causes crowded classrooms which make effective teaching/learning performance difficult. It also creates wide age differences among the students with the result that the older pupils victimize the younger students since advanced age claims respect for authority in Africa (Jones, 1988). These experiences lead children to either repeat classes or drop-out of the system. The process is cyclical. Thus, children in Malawi's primary schools attain less knowledge and skills (Heyneman, 1980) to enable them to participate fully in national development after their primary education than their counterparts in the First World. These educational conditions, which prevail in Malawi primary schools are incompatible with the country's developmental goals. This is a cause of concern and dissatisfaction among educators in the country as already shown above.

The educational conditions in the primary education sector, coupled with financial constraints, caused the Government of Malawi to seek external-donor assistance for the re-training of selected primary school administrators. They would, upon the

completion of their training, also train others in the school system. Thus, in 1983 the Malawi Government, through the Malawi Institute of Education, and the Canadian Government, in cooperation with Brandon University of Manitoba, signed an agreement aimed at establishing and conducting an in-service training programme for the educational leaders in the primary school system of Malawi. The programme agreement is officially known as the MALAWI INSTITUTE OF EDUCATION - BRANDON UNIVERSITY IN-SERVICE TEACHER EDUCATION PROJECT.

In April 1984, 90 School Heads and Inspectors of primary schools in Malawi reported for training at the Malawi Institute of Education. In the following year, 60 other School Heads and Inspectors enrolled in the same teacher programme. Both the first group and the second graduated from the in-service training in 1986 and 1987. Therefore, the present investigation, whose primary aim was to assess the participants' degree of satisfaction with the MIE-BU Teacher Programme, was designed to answer the questions below.

THE RESEARCH QUESTIONS

The study addressed the following questions:

1. (a) To what degree are the graduates satisfied or dissatisfied with the in-service training programme that they received at the Malawi Institute of Education at Domasi?

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(b)   What is the participants' ranking of satisfaction along the following dimensions?

- (i)   Achievement of academic knowledge and technical skills dimension.

- (ii)   Job-performance dimension.

- (iii)   Administrative dimension.

- (iv)   Collegial dimension.

- (v)   Recognition-support dimension.

- (vi)   Personal dimension.

- (vii)   Economic dimension.

(c)   For each dimension, which areas reveal a relatively high and low degree of satisfaction?

2.   Are there any differences in levels of satisfaction between:

(a)   The first graduates who completed the in-service training programme in 1986 and the second graduates who finished in 1987?

- (b)   Heads and Inspectors?

- (c)   Heads of urban, model, and rural schools?

- (d)   Heads of large schools and Heads of small schools?

- (e)   Male and female graduates?

- (f)   Older and younger graduates?

3.   To what extent are the graduates involved in operating in-service training programmes for teachers in the school system?

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RESEARCH METHODOLOGY

Subjects

The research was conducted in Malawi during the period May-August, 1988. The study participants consisted of all the School Heads and Inspectors who had graduated from the MIE-BU programme in 1986 and 1987. A total of 150 trainees enrolled in the programme in 1984 and 1985. However, 145 graduated and 5 others dropped-out while the training was in operation (Malawi Institute of Education, 1985). Thus, the 145 graduates constituted the population of the study. Of this population, 74 were School Inspectors and the remaining 71 were School Heads. Among the 145 participants, 115 were males and 30 were females.

The study also involved a sample of 15 primary school teachers who had worked under some of the trained School Heads in the districts of Blantrye, Chiradzulu, Machinga, and Zomba. The reason for the inclusion of the teachers in the study was to obtain another perspective regarding the performance of the graduates in the school system. It is acknowledged that both the sample size and the non-random selection of the subjects were some of the limitations of the research.

Instrumentation

To investigate the research questions stated above, a 2-part survey questionnaire was developed and validated. The first part

of the research instrument focused on the assessment of the participants' perceptions of satisfaction with the training programme along Herzberg's Two-Factor Theory and Maslow's Need Theory. Thus, the degree of the trainees' satisfaction with the MIE-BU Teacher Project was measured along the 7 dimensions of satisfaction listed as follows: (i) achievement of academic knowledge and technical skills, (ii) job-performance dimension, (iii) administrative dimension, (iv) collegial dimension, (v) recognition-support dimension, (vi) personal dimension, and (vii) economic dimension. Each of the 7 dimensions was further divided into sub-dimensions which were rated on a 6-point scale, where: 1=disagree strongly, 2=disagree, 3=tend to disagree, 4=tend to agree, 5=agree, and 6=agree strongly.

The final section of the questionnaire centred on demographic characteristics and school background. The intent was to determine whether any of the demographic and school factors were significant in influencing the participants' perceptions of their in-service training. The 2-part survey instrument applied to obtaining evaluation data from the School Heads and Inspectors only.

To obtain further evaluation information from the sample of the 15 teachers as previously mentioned, an interview schedule containing 8 questions was prepared and also validated.

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Data Collection

The research data were collected in 2 stages. Questionnaire data were obtained first, followed by the interview data. This was done to ensure that the interviews could not interfere with the completion of the questionnaires.

Data Analysis and Presentation

Data analysis involved coding of questionnaires, computer data entry, and summarizing for interpretation. These summaries were presented in table form known as descriptive statistics.

SIGNIFICANCE OF THE STUDY

A number of points can be raised regarding both the practical and theoretical importance of this case study.

1. The study was aimed at determining the level of the trainees' satisfaction with the CIDA-funded in-service teacher training programme in Malawi. Thus, such a goal is consistent with one of the principles of behaviourist learning theory which recommends the provision of feedback in the act of learning. In teacher education, pre-service students are taught that feedback enables both the instructor and the learner to gain knowledge of learning development. If, for example, student learning performance is not satisfactory, the teacher then seeks ways to promote it. On the other hand, if it is discovered that the

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students are successful at given tasks, then the teacher leads the class to the next set of learning activities. Therefore, by conducting a follow-up evaluation of the MIE-BU Programme, it was hoped that both the programme instructors and the participants would be aware of some of the strengths and weaknesses of the in-service programme. The knowledge of the deficit areas would enable the staff to review their courses and teaching procedures, since the programme is ongoing.

2. It was also hoped that knowledge of the research findings would be useful to a different level of decision-makers. Programme administrators might use the results and conclusions of this investigation to improve future training programmes in Malawi.

3. Operating a follow-up evaluation of a programme signals good public relations, since it demonstrates an attitude of caring. The programme participants then begin to realize that the training that they had attended was of great importance. The result of this is that the trainees become re-charged (Sadler, 1984). The follow-up evaluation reminds them of what they were expected to do and they do it.

4. In research, it is a standard that concluding remarks identify areas that need further investigation. By implication,

this throws light on what to look for when evaluating future programmes.

5.   The present investigation falls within the area of in-service teacher education. It was therefore believed that the study would make a contribution to the growing literature on in-service education activities.

6.   There is also the factor of dissemination (Hamilton, 1980). Other people might wish to know the goals of the MIE-BU Project and the processes that were employed to achieve the intended project outcomes.

SUMMARY OF THESIS

The research has been organized as follows:

Chapter I is an introduction, aimed at orienting the reader to the purpose and background of the study, the kinds of questions that the study attempted to answer, the research methodology, and the significance of the investigation.

Chapter II provides a detailed account of the background of the MIE-BU In-service Teacher Training Programme that was evaluated. Thus, the chapter provides a detailed description of educational problems encountered in the Malawi primary school system that moved the Government of Malawi to seek external-donor support for purposes of re-training primary school administrators and educational supervisors. This chapter also presents a

detailed account of all the processes that were undertaken in installing the project. Thus, there is discussion about how the needs assessment was conducted; about both the goals and specific objectives of the programme; and about how the programme was actually delivered.

Chapter III reviews the relevant research. It is in 2 parts. The first part reviews pertinent literature on in-service teacher training and staff development. The second section deals with methodologies for evaluation.

Chapter IV describes the research methodology used in this study. It describes the characteristics of the subjects involved in the study. It provides the justification of the research methods used and describes the development of the research instruments. It also presents procedures for data collection and analysis.

Chapter V presents a discussion of research findings in relation to the questions that the study addressed.

Chapter VI reviews the purpose of the study, the questions that the research had raised, the research methodology, the results of the investigation, and then discusses the research implications.

CHAPTER II

IMPLEMENTATION
OF THE MIE-BU PROJECT

BACKGROUND

This chapter deals with basic data on Malawi, in order to enable the reader to understand the educational issues that led to the operation of the in-service training programme for Heads of primary schools and Inspectors in the Republic of Malawi.

Malawi is a small land-locked country in Eastern Central Africa, with an area of 117050 square kilometres (Malewezi, 1988). Its next-door neighbours are Mozambique to the East and South, Tanzania to the North, and Zambia to the West.

In 1988, Malawi had a population of 7.7 million people, with an annual growth rate of 3.2% (Population Reference Bureau, 1988). This rate of increase is one of the highest in Africa. Various factors (including educational, cultural, social and economic) all combine to explain Malawi's high fertility rate which, in turn, affects its continuing rapid population growth (Goliber, 1985). To explain in detail how each of the above factors affects Malawi's high fertility rate is certainly beyond the scope of the present study. The Population Reference Bureau (1988) reports that 47% of the country's population is under the age of 15. Such a young population makes necessary educational expansion to accommodate the large numbers of children and young people of Malawi. Equally, it imposes pressure on the

improvement of quality and relevance of education in a country (Coombs, 1985). The greater the number of school children as suggested by Malawi's population, the greater the diversity of childrens' individual learning needs which must be attended to. Attention to individual learning needs is an aspect of relevance. To achieve relevance of education, there must be improvements in many areas, such as curricula, teacher preparation, educational supervision and so on. These undertakings are very costly.

THE EDUCATIONAL SYSTEM

Education in Malawi is not yet universal, compulsory and free. Parents or guardians pay fees for their wards.

The educational system is founded on 8 - 4 - 4 model. Children spend 8 years in primary education, then 4 years in secondary education, and finally, 3 to 5 years in university education, depending on the nature of the course. Children begin formal schooling at the age of 6. Some students may start formal schooling at later ages than 6 because not all the parents can immediately afford the fees. There has been increased enrollment of students in the 3 sectors of education since independence in 1964 (Malawi Ministry of Education and Culture, 1987). The table below supports the view.

TABLE 1.
Malawi: Student Enrollments in 1964 and 1986
(Higher education = University, Primary Teacher
Training, and Vocational Technical Training)

Year	Primary School	Secondary School	Higher Education	% Prop. from Prim. to Sec.	% Prop. from Sec to Higher Education
1964	359841	5951	1929	1.6	32.4
1986	1022765	25681	4756	2.5	18.5

Source: Calculated from Education Statistics,
Malawi Ministry of Education and Culture,
Planning Unit, Lilongwe, 1987, p. 3.

The following points may be made in connection with the above table. Between 1964 and 1986, there has been a large increase of 184% in primary school attendance in Malawi. There has also been increased student enrollment (332%) in the secondary school sector of the educational system. Although the proportion of students from the primary schools to the secondary schools is low, it can be noted that it has increased significantly from 1.6% to 2.5% during the same period. The enrollment in the higher education sector has increased also by 147%. At the same time, the proportion of students from secondary to higher education has fallen. This reflects the effort that Malawi has made in terms of its educational goals. Emphasis is first on primary education, followed by secondary and then higher education.

Administratively, the educational system is highly centralized, being characterized by common content in all the

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schools, common public examinations, and inspection. Centralization reflects conservatism which the system inherited from the colonial government. The figure below shows the administrative structure of the primary school system.

Figure 1
The Admistrative Structure of The Primary
School System

```
                  Ministry
              Headquarters (1)
                     |
                     v
                  Regional
            Education Offices (3)
                     |
                     v
                  District
            Education Offices (28)
                     |
                     v
        Primary Schools (Over 3000)
```
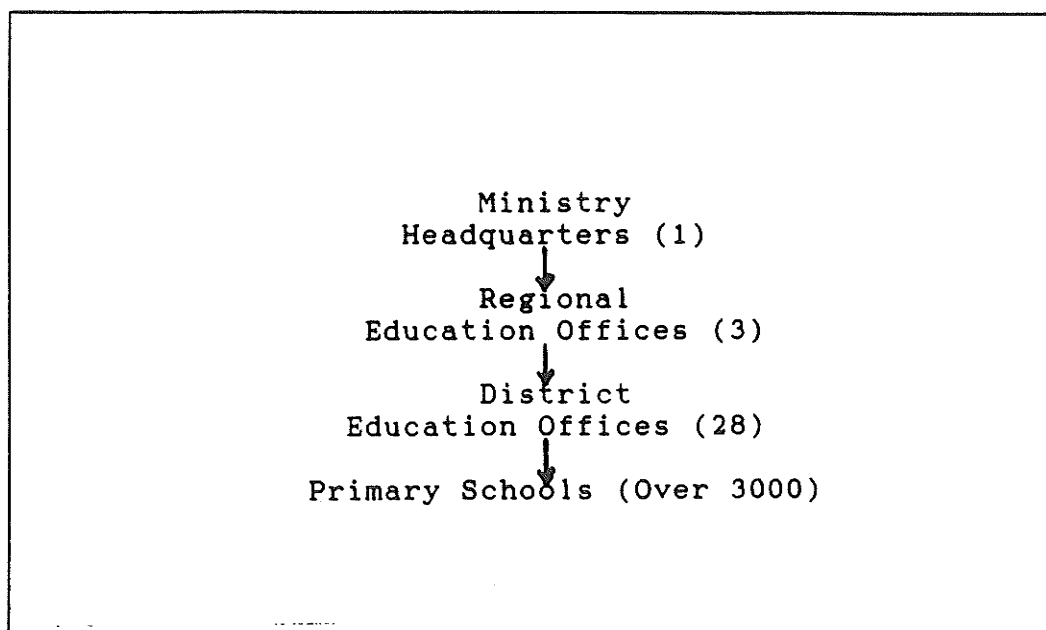
The Ministry of Education and Culture (Head Office) is located in the Capital City of Lilongwe. The Ministry is further represented by 3 Regional Education Offices since Malawi has 3 political-administrative regions: the Northern, the Central, and the Southern Regions. Each regional office is headed by a Regional Education Officer, who is charged with the responsibilities of administering and monitoring primary education at the regional level. Each Regional Education Officer is further assisted by 2 Assistant Regional Education Officers: one being responsible for general educational administration and the other for professional educational supervision. Both officers report directly to the Regional Education Officer who, in turn, reports to the appropriate officer at the Ministry.

Each of the three regions of the county is further divided into districts. There are altogether 24 administrative districts in Malawi. There is one education office in each district except in districts with towns and cities. In the latter case, the Ministry of Education and Culture has established two district education offices: one for the rural and the other for the urban section of the district. Altogether, there are 28 District Education Offices in the country. Each of these offices is under the charge of a District Education Officer. This officer is in charge of all primary education at district level. The District Education Officer is further assisted by School Inspectors, who are charged with the responsibilities of primary school inspection, supervision and professional staff development.

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There may be two or more School Inspectors in a district depending on its size. The School Inspectors report directly to the District Education Officer who, in turn, reports to the Regional Education Officer through the appropriate Assistant Regional Education Officer.

The last level in the hierarchy, though the most important of them all, consists of the primary schools. Each primary school is headed by a Headmaster or Headmistress. There are about 3000 Primary School Heads in Malawi (Kurian, 1987). This means, the District Inspector of Schools is responsible for a large number of Headmasters/Headmistresses in a district. Similarly, the School Head is responsible for many teachers and many students in the primary schools, especially in the urban areas. The School Head reports to the District Education Officer directly or indirectly through the District School Inspector.

Centralization implies that curricula, textbooks, inspection of teachers, and examinations are all controlled from the Ministry of Education and Culture. This type of control makes it difficult to introduce change into the educational system, since decisions affecting educational innovations must be approved by the central authority – the Ministry.

QUALITY OF PRIMARY EDUCATION

Setidisho (1988) notes the following regarding the quality of primary education in the country:

A great deal of concern has been expressed about the
quality of education, and it has been repeatedly stated
that the quality of primary education is of paramount
importance since it is the only form of education which
over 80% of the population can hope to get for many a
year to come if not ad infinitum (Setidisho, 1988; p.
2).

Setidisho believes that the many problems that affect the
quality of primary schooling in Malawi are a direct consequence
of a rapidly expanding educational system and the effects of
inflation whose effects are felt especially by young nations in
the developing world. The issues that affect the standards of
primary education are: the nature of the curriculum, inadequate
number of qualified and trained teachers, inadequate classrooms,
non-availability of school resources, examinations and selection
leading to high repetition and drop-out rates, unsatisfactory
teaching, educational provision, inadequately prepared School
Heads and Inspectors, and ineffective administration of the
school system (Heyneman, 1980; Setidisho, 1988).

(a) Curriculum:

The Ministry of Education and Culture is the central
authority that prescribes curriculum for all schools in the
country. Table 2 shows the recommended curriculum and teaching
period allocation to be followed by all the primary schools in
the country (Malawi Ministry of Education and Culture, 1982).

Table 2
Malawi: Primary School Curriculum and
Allocation of Subjects in Periods Per Week

| | | | | S T A N D A R D S | | | | | |
List of Subjects	1	2	3	4	5	6	7	8
Compulsory Subjects:								
* 1. Agriculture	-	-	-	-	-	4	4	4
* 2. Arithmetic	5	5	5	5	5	6	6	6
3. Arts and Crafts	2	2	1	1	1	1	1	1
* 4. Chichewa	10	8	8	8	8	4	4	4
* 5. English	5	7	9	9	9	9	9	9
* 6. Geography	2	2	2	2	2	2	2	2
* 7. History and Civics	2	2	3	3	3	3	3	3
* 8. Health Education	2	2	2	2	2	2	2	2
9. Music	2	2	1	1	1	1	1	1
10. Physical Education	2	2	2	2	2	2	2	2
11. Religious Education	3	3	3	3	3	3	3	3
*12. Science	2	2	2	2	2	2	2	2
Total No. of Periods per week for regular school	37	37	38	38	38	39	39	39
Subjects for Special Schools								
13. Handicraft (Boys) or Housecraft and Needle work (Girls) or Craft and Technology (Boys)	-	-	2	2	2	4	4	4
Total No. of Periods per week for special school.	37	37	40	40	40	43	43	43

* Examinable subject

Source: Malawi Ministry of Education and Culture (1982):
          Primary School Syllabuses. Lilongwe, Malawi:
          Ministry of Education and Culture, p. 13.

   The   data in the table above show   that the curriculum   is

problematic.   There are too many subjects to be   handled   by   one

class teacher.   Many people believe that the   such   a   curriculum

breadth leads to teacher overload (Malawi Institute of Education,

et   al,   1988).   This   reduces   the   quality   of   teaching and

learning and therefore   the   pupil   performance   in   the   primary

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schools. As already pointed out, a significant proportion of teachers in the country are professionally untrained. Thus, it can be suspected that the primary curriculum is not effectively delivered since the untrained teachers are not competent to handle the prescribed subjects (Malawi Institute of Education, et al., 1988). Small scale unpublished research studies conducted by students at the University of Malawi confirm that primary school teachers teach only those subjects that they feel they are comfortable with. For example, in standards 1 - 4, primary teachers teach only 4 subjects: English, Chichewa, arithmetic and science (Malawi Institute of Education, et al., 1988). The teaching of only 4 subjects could be an expression of teacher overload.

The researcher's experience with the primary educational system in Malawi leads him to the conclusion that the curriculum content is highly academic with very little practical orientation to cater to the learning needs of the majority of the pupils. Lack of relevance in curricular content is general in Africa as shown in the quotation below:

> ... in many African countries, the structures and content of education still suffer from having been conceived and developed outside Africa with no real ties to the cultural traditions, urgent economic requirements or specific aspirations of African peoples.
>
> Primary education in Africa, ..., is too speculative and, consequently, tends to draw children away from the realities of their own countries. Since it is not sufficiently adapted to a specifically African psychology, it too often neglects the links between the

> individual and his civilization, it gives too little
> attention to the relationships between individuals and
> groups, and, worst of all, it ignores national
> development problems and gives young Africans no
> motivation to contribute their talents and energies to
> African social and economic progress (Rajaona, 1969; p.
> 15).

Much of what is taught in the primary schools of Malawi is not sufficiently adapted to the practical realities of the situation in the country as supported by the following statement made at a curriculum conference at the Malawi Institute of education:

> Primary education should achieve permanent functional
> literacy and numeracy. It should prepare pupils for
> life. Emphasis should be on practical skills relating
> to the socio-economic structure of the country. (Malawi
> Institute of Education, et al; p. 23.)

The Malawian primary educational system needs to address such issues as the need for increased food production, resource use, planning, management and conservation, population and family planning studies, health and nutrition, and skills training, to mention only a few of the areas. Further, it would also be necessary for the Ministry to provide teaching/learning support materials in all areas of study. Such materials would have to be written in Chichewa, the national language, particularly for the lower classes (that is, Standards 1-5). At this level of development, it is more effective to use the language of the learner. In so doing, the system can achieve educational relevance. These suggestions are even recommended by Yoloye (1986; p. 149) who states that the relevance of educational content should take account of:

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the African environment, the African child's
development, the African cultural heritage, and the
demands of technological progress and economic
development.

Rajaona (1969) suggests that such an education be addressed to
African rural life. Rajaona's view is shared by the World Bank
(1980), Tibbetts, et al., (1968) and Postlethwaite (1982), who
all emphasize that if a curriculum is to be relevant, it should
consider the background of students as well as their language.
These aspects should be reflected in all the instructional
content and processes. Relevant education can take the form of
practical agriculture, nutrition education, family education
studies, technical education and skill training projects, and
other non-formal human resource development programmes. These
aspects of education should lead the African child to live a
productive life after school (Dubbeldam, 1982). But the real
problem is that such areas of study are often regarded by people
in the developing countries as a second rate form of education
(Johnston and McNab, 1985). To overcome such a problem, Malawi
could make two distinctions in the content of primary education:
a common core and various options (Rasseka and Vaibeanu, 1987).
The common core is a compulsory minimum for all the students in
the schools. It would include knowledge, skills, and values
which the Malawian society considers necessary for all its
members. On the other hand, the options are specific contents
                            of
determined in the light/the students' aspirations, interests, and

aptitudes and also in the light of   cultural and socio-economic

needs.   According to Rassekh and Vaideanu (1987; p. 167):

> This approach maintains the fundamental unity of the
> education system and hence preserves equality of
> opportunity while at the same time making it possible
> to provide a better response to individual expectations
> and to development demands (Rassekh and Vaideanu, 1987;
> p. 167).

Thus, if Malawi made an attempt to re-organize its curricular

content consistent with the above formula, education would

achieve relevance.

Table 2 above also shows that some subjects are examined at

the end of Standard 8 while others are not. The hidden message

is that the examinable subjects are more important that the non-

examinable ones. Thus, the primary school teachers concentrate

their teaching efforts only on the examinable subjects. The same

may apply to the pupils. It may be possible to suspect that

little learning is occurring in the non-examinable areas of

study since success is often related to effort.

A glance at the same table also confirms the presence of

inequalities among educational opportunities in the primary

curriculum. Certain subjects (for example, handicrafts, craft

and technology, housecraft and needlework) are offered only in

special primary educational institutions. It is only those

students attending such schools who have a chance to study these

subjects. Thus, primary school students in Malawi develop

different knowledge and skills because of differences in what

they study in the school system.

The allocation of periods is unequally distributed as well. Some subjects have more teaching periods than others. Again, this informs both teachers and students that those content areas with a higher allocation of time are more important than those with a lower allocation. All other things being equal, students are more likely to do better in those subjects with a higher period allocation than in those with a lower allocation since the former presumably allows more time on learning tasks. This conclusion is further supported by Coomber and Keeves (1973) who indicate that the more hours allocated to instruction time in a subject, the higher the likelihood that learning goals can be achieved.

(b) Inadequate Number of Qualified and Trained Teachers

It is reasonable to assume that teachers make a difference to student learning. Research studies carried out in the developing countries indicate that a relationship exists between teacher training variables (such as number of years spent in teacher training and qualification obtained) and student learning (Husen, Saha and Noonan, 1978; Coomber and Keeves, 1973).

In Malawi, the annual increase in the number of professionally trained primary school teachers has not kept pace with the increase in school enrollments. This problem is also general in the developing world (Kaluba, 1986; Dubbeldam, 1982; Unesco, 1970; and Tibbetts, et al., 1968). As in other

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countries, the Malawi educational decision-makers have had to make do with the recruitment of untrained teachers for teaching positions in the primary schools (Setidisho, 1988).

Thus, there are 4 sorts of categories of primary school teachers in Malawi according to the definitions of the Ministry of Education and Culture. The classifications of the teachers are, namely: qualified and trained, qualified and untrained, qualified and undertrained, and finally, underqualified and undertrained. The duration of primary teacher training is 2 years and the requirement for admission to such programmes is 2 or 4 years of a student's successful completion of secondary education. Therefore, a student who meets the above entry requirements and training is called a qualified and trained teacher when he or she has successfully completed the pre-service programme. As already noted above, increased student enrollments in the primary schools moved the Ministry to recruit for teaching purposes students who have had 2 or 4 years of secondary schooling. In Malawi, such teachers are referred to as qualified and untrained teachers, since they have the appropriate academic qualifications with no training provided. As indicated in Chapter I, the Government is aware that the participation of this category of teachers is one of the contributory factors of low student performance in the schools of Malawi, since this group of teachers would face difficulties in teaching, especially the lower primary classes. Thus, 2 new teachers' colleges (Domasi and Karonga Teachers' Colleges) have been established to train

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this group of teachers. This training lasts 1 year and not 2 years. Since the duration of the training is shorter than normal, the candidates who complete the training are addressed as qualified and undertrained.

There are also some teachers in the educational system who trained during the early post-independence period. These teachers had only 5 or 8 years of primary schooling as their basic qualification for teacher training. The pre-service curriculum that they studied at the time reflected the content of primary education of the day. However, the content of primary education in Malawi has undergone significant changes since 1964. Therefore, such teachers are called underqualified and undertrained in the light of present day circumstances. In Malawi, all the teachers who have had no training and all who are considered undertrained are categorically referred to as unqualified teachers. Those who have met the present admission requirements and have, therefore, been trained for 2 years are categorically qualified teachers. Table 3 shows the proportions of both qualified and unqualified teachers participating in the school system.

TABLE 3
Malawi: Proportions of Qualified and Unqualified
Teachers In Primary Schools, 1986/87
(Q=Qualified; UQ=Unqualified)

	Assisted Schools			Unassisted Schools			
	Q	UQ	% UQ	Q	UQ	% UQ	% Total UQ
REGION							
Northern Malawi	2625	351	11.8	13	178	93.2	16.7
Central Malawi	4793	689	12.6	14	226	94.2	16.0
Southern Malawi	5903	764	11.5	57	511	90.0	17.6
Totals	13321	1804	11.9	84	915	91.6	16.9

Source: Calculated From Malawi Ministry of Education and Culture
(1987): Education Statistics. Lilongwe, Malawi:
Ministry of Education and Culture, p. 34-36

The above data indicate obvious differences in the
proportions of the unqualified teachers in the unassisted schools
as compared to the assisted. The unassisted have higher
proportions of the unqualified teachers than the assisted. The
explanation is that the former have not met the ministry's
prescribed standards of school buildings. Therefore, such
schools do not receive any support from Government either by way
of funding or teacher supply (Malewegi, 1988). Thus, in the
absence of this type of support, the schools employ the
unqualified teachers since they are cheaper to pay. Further, the

majority of the unassisted schools are owned by missionary groups whose goals are focused on teaching and spreading the Gospel. Thus, it may be suspected that they do not mind the participation of the unqualified teachers in their schools.

The unqualified teachers constitute about 16% of all the teachers participating in the school system. The participation of such teachers seriously affects the quality of instruction as well as that of the product since such teachers would face difficulties in teaching both the advanced classes and the more difficult subjects (Cohn and Rossmiller, 1987).

(c) Inadequate Classrooms

Malawi's financial resources have not made it possible for the provision of enough classrooms. Hence, the primary classrooms are over-crowded. Setidisho (1988; p. 4) reports:

> The average class size is 65 but it is known that this number varies from 45 to 150 (Setidisho, 1988; p.4).

Over-crowding is pronounced especially in the lower primary classes as well as in the examination classes where repetition rates are high (Malawi Ministry of Education and Culture, 1987). Large class sizes, inadequate numbers of trained teachers, and inadequate facilities and materials all contribute to poor learning environments in many Malawian schools.

(d) Non Availability of School Resources

Heyneman (1980; p. 15) has observed the following characteristics of primary schools in Malawi:

> ... classrooms are dark and stuffy; pupils are forced
> to squat on the ground and write by balancing an
> exercise book or slate on their knees, ...many schools
> have no maps; no student in any school surveyed
> possessed a geography book; or history book; or
> agriculture book; ...not a single book available in
> health education or religion or general science;...no
> primary school had a library. (Heyneman, 1980; p. 15).

One of the defining criteria of an acceptable school according to Heyneman is that it provides students with desks and chairs as opposed to a school where children sit on the floor and write on their knees as is the situation in the Malawian schools. Mwamwenda and Mwamwenda (1987) describe such learning conditions as physiologically tiring, physically cumbersome and educationally less productive. Empirical investigations conducted in Botswana conclude that students who have access to desks and seats perform better than those in schools without such facilities (Mwamwenda and Mwamwenda, 1987).

According to Setidisho (1988), another necessary requirement for a school system to be effective is that there must be adequate text-books, guides or handbooks and, teaching and learning aids. In the Malawian primary schools, books and visual aids of various kinds are either not available or are in short supply as disclosed by the data below.

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TABLE 4
Malawi: Availability of Textbooks in the Primary Schools
(in Thousands).

	STANDARDS							
	1	2	3	4	5	6	7	8
Student enrollment ('000)	266	190	145	104	78	79	63	98
Arithmetic textbooks	257	152	103	83	66	57	46	75
Chichewa textbooks	221	130	86	67	56	54	38	64
English textbooks	253	115	95	75	50	52	43	74

Source: Calculated From Malawi Ministry of Education and Culture
(1987): Education Statistics. Lilongwe, Malawi:
Ministry of Education and Culture, p. 62-70

The above statistics show that in the Malawian schools books
are available only in the 3 subjects of arithmetic, Chichewa, and
English. There are no books for the other subjects taught in the
schools as exhibited in Table 2. The above table also reveals
that the available texts are not adequate for every learner.
Students share books.   A lack of books inhibits learning
development since it is well known that text-books provide
learners with opportunities to obtain additional information on
topics covered by a teacher in class. In so doing, text-books
enable students to acquire additional cognitive knowledge and
skills.   Further, they   assist   in the improvement of what has
been learned in class (Mwamwenda and Mwamwenda, 1987).   A lack of
or an inadequate supply of them inhibits learning achievement.
This has led Heyneman's Malawi study (1980) to the conclusion
that schools in Malawi produce lower achievement results than do
other schools in selected developing and developed countries
where text-books are available.   Heyneman's conclusions are

further supported by the results of empirical research on the effects of text-books on achievement. For example, studies on the effects of text-books on achievement conducted in Nicaragua, the Philippines, Thailand and in other developing countries have pointed out that text materials affect student performance in the developing world (Lockheed, et al., 1987; Jamison, et al., 1981; Heyneman et al., 1983; Simmons and Alexander, 1978).

(b) Examinations, Repetition and Dropout

The colonial government left not only foreign educational
content in the educational systems in Africa, but also/rigid^{a}
examination structure. The Malawi educational system, like many other systems in developing Africa, emphasizes examinations. Examinations are inevitable in the educational system because of the conditions of limited economic resources (Psacharopoulos and Woodhall, 1985). It should be noted that the economy of Malawi relies heavily on agriculture. Thus, the practice of examinations in the school system is a practical consideration of the country's economic realities. The economy cannot absorb everyone who graduates from school.

There are examinations all along the primary school grades. And when students complete Standard 8, which marks the end of the primary school cycle, they write the Malawi Primary School Leaving Certificate Examinations. These examinations are academic and rigid . They focus on measuring knowledge, and if a

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student does not do well in one area of study, he or she fails the entire exam. They are also highly competitive since they act as a passport to secondary education which is open to only a small proportion of students as shown in Table 5 below.

TABLE 5
Malawi: The Standard 8-Form 1 Transition Rates
and the Percentage of Push-outs: 1977/78-1986-87

Year	Standard 8 Enrollments	Number of Form 1 Places	% of Std. 8 Obtaining Form 1 Places	% of Push-outs
1977/78	52047	4854	9.3	90.7
1978/79	54195	5210	9.6	90.4
1979/80	65007	5260	8.1	91.9
1980/81	70661	5408	7.7	92.3
1981/82	76457	5578	7.3	92.7
1982/83	79753	6068	7.6	92.4
1983/84	83966	6348	7.6	92.4
1984/85	85804	6906	8.0	92.0
1985/86	89461	7184	8.0	92.0
1986/87	96867	7376	8.0	92.0

Source: Calculated From Malawi Ministry of Education and Culture (1987): Education Statistics. Lilongwe, Malawi: Ministry of Education and Culture, p. 33

Form 1 is equivalent to Grade 9 in some systems of education. The proportions of students entering Form 1 after Standard 8 are determined by the availability of Form 1 places in the secondary schools. The table above reports small proportions of students passing from Standard 8 to Form 1. The chart also displays high rates of push-outs. The latter are the students who are left without places in secondary education. Consequently, they either repeat Standard 8 or drop-out

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completely. This has serious educational consequences. First, repetition is very wasteful of educational talent since the participation of repeaters reduces a school's intake (Loxley, 1987). Second, repetition is also wasteful in economic terms since it means that the educational system continues paying for the same service twice or three times. This is exactly what educational economists mean when they say repetition increases unit costs (Loxley, 1987). Third, repetition leads to low student achievement which, in turn, leads to either further repetition or complete drop-out. Repeating a class reduces a learner's motivation via his or her self-image. It is a common basic understanding that a relationship exists between motivation and achievement. The higher the motivation, the better the achievement and the reverse is equally true. Poor school achievement is a cause of drop-out (Psacharopoulos and Woodhall, 1985; Cameron and Hurst, 1983).

The hidden curriculum delivered by a repeater's presence in a classroom is that non-repeaters who participate in the same class become convinced that the act of learning is difficult. Of course, there will be a small number of students who will accept the presence of repeaters as a challenge. But the majority of students are more likely to experience enhanced levels of anxiety. This may lead to reduced student interest as well as motivation. Repetition also creates wide age differences among members of a class. This does not only contribute to teaching problems for a teacher, it also causes learning problems among

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the students themselves. The behaviour of the "older" repeaters may affect the "younger" students since advanced age claims authority and respect in African societies (Jones, 1988). These combine to affect learning performance. This is what examinations do in Malawi. There is repetition across all the standards in the school system. Figure 2 provides evidence.

Figure 2
Malawi: Enrolment and Percentages of Repeaters
in the Primary School System: 1984/85
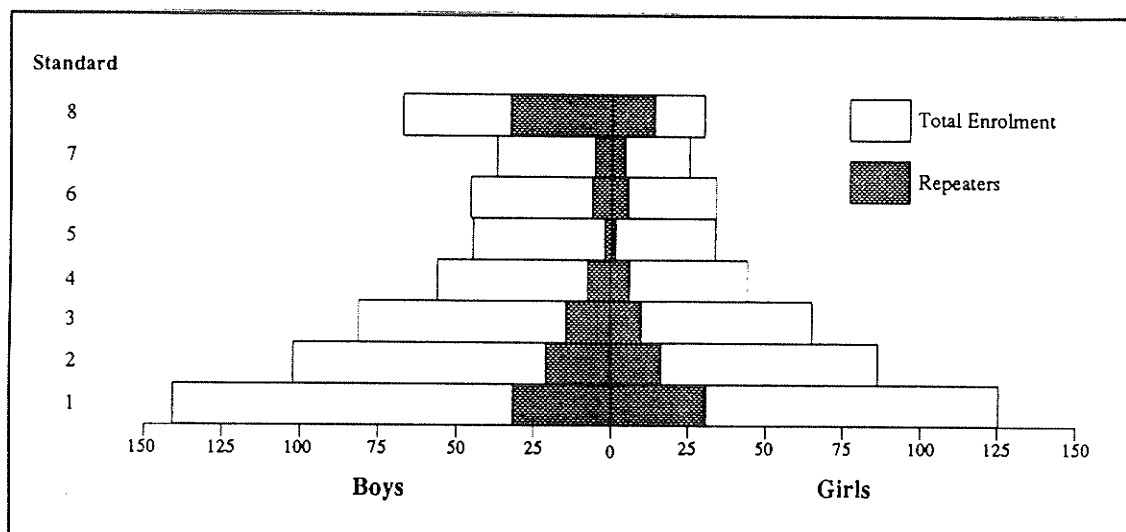
Source: Adapted From Malawi Ministry of Education and Culture
(1987): Education Statistics. Lilongwe, Malawi:
Ministry of Education and Culture, p. 5.

What becomes obvious in this graph is that repeater rates are highest in Standards 1, 2, and 8, and lowest in Standard 5. The lower classes are over-crowded, a condition which contributes to poor learning performance. At the same time, there is no

policy for automatic promotion in Malawian schools. Thus, a high proportion of students in Standards 1 and 2 fail to pass teacher-set promotional examinations which they write at the end of each school year. The majority of the students repeat the classes. As already stated, in Standard 8 students write a secondary school selection examination. This is a public examination which is standardized and administered by a separate examination board. The majority of students who are not selected for secondary education back up in attempt to gain a pass to secondary school. This explains the high repetition rates in Standard 8. On the other hand, there is a significant drop in repeater rates in Standard 5 in part because of the effects of drop-out. Those who do not qualify for promotion to Standard 6 just drop-out of the school system.

Figure 2 also confirms the fact that student enrollments decrease across the standards, except in Standard 8. A contributory factor to student drop-out is the practice of examinations in the school system (Psacharopoulos and Woodhall, 1985) since examinations become the curricula in the schools. Teaching to examinations leads to deadening lessons and this affects performance. The relationship between examinations and achievement has been discussed already. There are other causes of drop-out. They include poverty leading to malnutrition and high rates of student absenteeism; a feeling of irrelevance; poor classroom conditions; an expectation for early marriage on the part of the girls; a lack of text materials; and poorly trained

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teachers (Psacharopoulos and Woodhall, 1985; Cameron and Hurst, 1983).

The issues of repetition and drop-out are serious matters, and are not compatible with the goals of development. In their book, <u>Education for Development</u>, Psacharopoulos and Woodhall (1985) offer some practical suggestions that would contribute to student progress in the primary schools in the developing world. They recommend: automatic promotion from one grade to the next; a reduction in the number of examinable subjects; improvement in the curriculum so that it takes account of the students' interests and their background; provision of learning materials of various kinds; introduction of school meals; and several more measures. If these measures were to be implemented, incidents of repetition and dropout would certainly be reduced in the Malawi primary school system.

(f) Unsatisfactory Teaching

Such school characteristics as shortage of qualified teachers, over-crowding in some classes, a lack of instructional resources in the form of text materials and all types of visual aids, unsatisfactory curricula and an emphasis on examinations all lead to the traditional "chalk and talk" and "drilling" teaching methods in Malawi primary schools (Cameron and Hurst, 1983). "Chalk and talk" and "drilling" teaching methods are passive forms of teaching which do not encourage learners to think. If children are to derive benefit from learning

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situations, they must be allowed to engage in inquiry activities.

(g) Educational Provision

There are marked variations in school characteristics between urban schools and rural schools as well as between assisted and unassisted schools. The urban primary schools are usually better served in terms of buildings, equipment and staff than the rural schools. The contrast between assisted and unassisted schools is even more marked (Cameron and Hurst, 1983). The average assisted school retains a much higher proportion of its pupils from Standards 1 to 8 than the average unassisted (Malawi Ministry of Education and Culture, 1987.). The chart that follows below provides concrete evidence.

TABLE 6
Malawi: A Comparison of Student Enrollments
In Assisted   and Unassisted Primary Schools, 1986/87

STANDARDS	Assisted Schools	Unassisted Schools
1	240821	25169
2	175054	15304
3	135516	9928
4	97484	6257
5	74311	3779
6	78646	565
7	62069	412
8	96867	583

Source: Calculated from Education Statistics, Malawi Ministry
         of Education and Culture, Planning Unit, Lilongwe,
         1987; p. 7-8.

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The statistics show that there is a general decline of student populations across the standards for both categories of schools. However, the fall in student enrollment is greater in the unassisted than in the assisted schools. There is a steep drop in the number of students retained in the unassisted schools in Standard 6. Further, unassisted schools have poor facilities. About 1 in 16 has a desk, and 1 in 35 has a chair to sit on in the unassisted schools. By contrast, 1 in 12 students writes on a desk in the assisted schools and 1 in 14 has a chair to sit on (Malawi Ministry of Education and Culture, 1987). It has already been mentioned that the non-aided primary schools have high proportions of unqualified teachers. All these factors combine to reduce student enrollments and affect both the amount and quality of what is learned in the unassisted schools.

(h)   Inadequately Prepared School Heads

In Malawi, as in many other developing countries in Africa, teachers are promoted to school headship positions on the basis of their teaching performance which is judged by the number of students they pass to secondary schools. The School Heads do not have any appropriate background training in such areas as educational administration, leadership and supervision. Hence, they are not able to provide adequate professional supervision, appropriate management, organization and administration of schools which, in turn, would facilitate teaching and learning

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development (Setidisho, 1988). Setidisho further states that the school heads are not able to provide sound professional leadership. Applied to learning performance, this means student achievement has been affected since studies on school effectiveness report a positive relationship between student performance and school leadership (Mortimore and Sammons, 1987; Sweeney, 1982).

(i) Inadequately Prepared School Inspectors

Both trained and untrained teachers within the system need professional assistance all the time. Their teaching skills must be upgraded periodically. Such a need is even greater in times of curricular reform (Setidisho, 1988). Similarly, School Heads also need help in such areas of their professional responsibilities as personnel management and administration, leadership, and supervision. This calls for the services of an Inspector who is professionally and technically well equipped to support the functions and responsibilities of the Heads. Like the School Heads, the Inspectors also come into post on the basis of promotion from the post of a teacher or Head. With them also the criterion for promotion is the number of students passed to Form 1 places in secondary schools. No School Inspectors have been trained for their functions of educational supervision and professional development of teachers in the school system. Thus, the Inspectors are inadequately prepared for the effective performance of their professional duties and functions.

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Consequently, both teachers and School Heads have largely been operating without the Inspector's effective professional assistance. In the absence of such assistance, student performance can be affected since a lack of effective professional supervision can lead teachers to perpetuate their old ways of teaching. Such old, poor methods of teaching contribute to ineffective learning on the part of the students.

(j) Ineffective Administration of the School System

Setidisho (1988) feels that the primary education system is administered ineffectively. Sometimes schools begin a term without basic supplies in the form of chalk and exercise books for students' use. It is also known that these basic learning resources could well be available at a District Education Office or at a Regional Education Office. The administration of the system appears to show a lack of initiative of those responsible for the operation of the school system. The following statement, made by the Principal of Malawi Institute of Education, provides further evidence:

> An education system cannot function efficiently and effectively unless: it has committed and dedicated administrators; the administrators begin to realize that administration is as much a profession as any other; they develop a sense of duty and responsibility; they develop a positive attitude to their work; become innovative in their administration, take positively good initiatives and act promptly. (Setidisho, 1988; p.6)

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One wonders whether ineffective administration of a school system does not have an effect on student performance.

The researcher's experience with the educational system appears to suggest that there is high staff turnover among the administrators. The administrators are frequently transferred between posts across districts, regions or even across sections within the educational system. According to Mosha (1988) frequent staff transfers give birth to psychological feelings of denial and insecurity of opportunity for bureaucrats to participate fully in the school system. Feelings of denial and insecurity may cause administrators to lack initiative in making practical decisions affecting schools. Secondly, high staff turnover rates block continuity with the result that important events affecting teaching and learning are lost during the process.

SUMMARY

The preceding sections have examined the nature and magnitude of educational problems encountered in the Malawi primary school system. These problems include unsatisfactory curriculum; inadequate numbers of trained teachers; inadequate numbers of classrooms leading to large class sizes and high pupil-teacher ratios; high repetition and drop-out rates; non-availability of learning resources; unsatisfactory teaching; unequal provision of school facilities between urban and rural schools as well as between assisted and unassisted schools;

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inadequately prepared Heads of Schools and Inspectors; and an
ineffective administration of the primary school system. These
problems signal a crisis in education since they contribute to
low educational achievement in the primary schools as revealed
by the results of a study on academic achievement conducted by
the St ff of the World Bank in Malawi (Heyneman, 1980). The
World Bank selected achievement test items from the International
Evaluation of Education Achievement (IEA) in the areas of science
and reading. These tests were given to Malawian Standard 8
students, aged 16 on the average. The investigation was
conducted with students in the 2 districts of Malawi, namely,
Mulanje and Nsanje districts. The results of the achievement
tests were then compared to the responses of 10-year olds
(usually 4th grade students) in 16 other countries. Table 7
presents a summary of the findings.

TABLE 7
Academic Achievement in Primary Schools: In Malawi
and 16 other Countries (% of items correct)

Country	Reading Comprehension	General Science	Sentence Comprehension c/
Malawi a/	34	42	51
Thailand	b/	47	b/
Chile	61	36	42
India	53	36	27
Iran	39	32	39
Average	45.8	38.6	42.3
England	71	56	82
U.S.A.	67	61	77
Sweden	72	60	36
Scotland	70	51	79
Netherlands	69	48	82
Flemish Belgium	65	53	85
Japan	b/	61	b/
Germany	b/	51	b/
Hungary	70	53	60
Finland	74	57	74
French Belgium	74	48	88
Italy	65	55	84
Average	69.7	54.5	79.7
Overall Average	55	50	69

a/   Average age in Malawi among those who responded to the
      achievement items was 16 years   ; in all other countries
      the respondents were 10 year olds.

b/   10 year olds did not take this test in these countries.

c/   Percentage missing one or none of nine items. In Malawi
      the first two items were given as examples; therefore, the
      percentage represents seven, rather than nine items. This
      constitutes a 22% advantage.

Source: Adopted from Heyneman, S.P. (1980): The Evaluation of
          Human Capital in Malawi, Washington, D.C.: The World
          Bank, p. 73.

The score for reading comprehension obtained by the Malawian students in Mulanje and Nsanje districts was 34%. That was the lowest score among all the country scores. In the area of general science, the Standard 8 students in the 2 districts of Malawi got 42% of the science achievement items correct. This performance was better than what the 10-year olds obtained in Iran (32%), Chile, and India (36%). However, the percentage of correct responses in Malawi was lower than that of Thailand (47%) and the rest of the countries in the developed world. In sentence comprehension, the Malawi score was not as severe (61%). In fact, the students in Mulanje and Nsanje districts of Malawi outperformed the 10-year 4th graders in India (27%), Iran (39%), Chile (42%), and Hungary (60%). Nevertheless, the score was significantly below that of England (82%), French Belgium (88%), Italy (84%) and the rest of the industrialized countries. Although the Malawi data are not representative of the nation as a whole, they do suggest an important trend: that by the time students are in Standard 8, they have learned less science and cannot read as well as 4th graders from other developing and developed countries involved in the sample. As mentioned earlier, it is this factor of low achievement which has caused considerable concern and dissatisfaction among educators, parents and educational policy makers. Educational standards have been
          to be
reported/declining steadily (Malawi Institute of Education, et al., 1987). Of course, there is reason to be concerned about the quality of education received in schools since a low quality

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education is not   compatible with national developmental goals
of eradicating illiteracy, disease and hunger.

TOWARD IMPROVING THE QUALITY OF SCHOOLING IN MALAWI

It is clear that, in order to improve the quality of
learning in the schools in terms of matching the educational
content with the socio-economic values of the country, and in
terms of both the amount of what is learned and by how many,
immediate attention should be given to reforming the whole
educational process.   The educational reform process should be
directed at re-evaluating the educational goals, structures,
processes, contents, and methods of primary education.   It is
these aspects which are problematic in the system.   However, it
should be pointed out that the newly launched educational plan
for Malawi has provided for all the above suggestions (Malawi
Ministry of Education and Culture, 1985).   Thus, one of the most
significant approaches to improving the standards of education in
the country, under the present education development plan, is
staff development of the professionals participating in the
school system. To improve schools, it is very important that
chief consideration be given to the human dimension of the
problem.   After all, it is the people who can further support
school   improvement processes in the system through initiating
and supporting innovative educational policies.   Fullan (1987)
emphasizes that:

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> ... staff development is central to virtually every
> approach to educational improvement: planned change,
> effective schools, ... school improvement, curriculum
> implementation ... (Fullan, 1987; p. 213).

Further, Schubert (1986) points out that staff development causes people to change their perceptions. People change in their understandings, behaviours, attitudes, pedagogical value systems and beliefs. Such changed perceptions cause them to support and implement educational innovations (Schubert, 1986) since the changed perceptions represent changes in thinking and doing (Fullan, 1987).

If school improvement is to take place through staff development, then the latter must be addressed to the school unit level. This argument is supported by Goodlad (1975; p. 110) who stresses that:

> The single school is ... the proper unit for
> educational change (Goodlad, 1975; p. 110).

Change must be focused on those who are close to the problem, that is, those who face the problem every day. In the case of Malawi, this implies staff development for the teachers, the school heads and the school inspectors. There are about 24000 primary school teachers in Malawi (Malawi Ministry of Education and Culture, 1985). Staff development for all the teachers in the schools is almost impossible due to costs, the number of persons that would be required to operate staff development

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activities for 24000 teachers and the amount of time required to reach the target audience. A more practical alternative is to conduct staff development for the school heads and inspectors. Heads and Inspectors are not only fewer in number (3000 and 80 respectively) but they also are instructional leaders. As pointed out earlier, research studies on school effectiveness indicate a strong, positive relationship between leadership and student learning in classrooms (Mortimore and Sammons, 1987) since instructional leaders not only promote educational policies and processes in the schools, but they also influence what a teacher can or cannot do. Snyder (1983) reports that:

> The principal can make a fundamental difference in the performance of a school by involving staff members in school improvement planning, specific teacher and program development, and in careful assessment. Schools can produce the levels and the kinds of learning that society expects as principals become increasingly more skilled at organizing teachers in various permanent and temporary arrangements to work toward specific goals. Raising achievement norms depends on knowledgeable leadership and planned collective action (Snyder, 1983; p. 37).

What this means in practical terms, is that implementation of staff development for School Heads and Inspectors, who are both instructional leaders, should contribute to achievement in the primary schools of Malawi.

THE MIE-BU TEACHER PROJECT MODEL

Staff development for identified instructional leaders entails great expense. The economic conditions in developing

countries are not favourable to this kind of activity. Although the effects of inflation are felt everywhere, they are especially severe in developing countries. Such financial constraints, coupled with the need to improve the learning process in the Malawi primary school system moved the Government of Malawi to seek external-donor assistance. In 1981, discussions with the Government of Canada were initiated (Halamandaris, 1988; Setidisho, 1988b.). These discussions were followed up by a team of four Canadian Assessors who went to Malawi in 1983 to conduct a needs assessment. The team met and held discussions with various people participating in the educational system. Discussions were also extended to involve people in the University of Malawi. Appendix B which indicates a programme of the team's visits while in Malawi is self explanatory (Halamandaris, et al., 1983). The Canadian team identified the educational problems as already discussed. The team also further supported the concept that the target population for the training should be the School Heads and Inspectors (Halamandaris, et al., 1983).

In the same year, 1983, the Malawi Government and the Canadian International Development Agency (CIDA) signed an aid agreement aimed at installing and operating a staff development programme for educational leaders in the primary school system. This aid agreement was to operate under an institutional link between Malawi Institute of Education and Brandon University of

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Manitoba. Hence, the project adopted the official title of MALAWI INSTITUTE OF EDUCATION - BRANDON UNIVERSITY IN-SERVICE TEACHER EDUCATION PROJECT. The programme of training commenced in May 1984 with 90 participants. In the following year, 1985, there was an additional enrolment of 60 participants, bringing the total to 150, which is the accommodation capacity of the Malawi Institute of Education. Both groups of participants completed their training in 1986 and 1987.

IMPLEMENTATION STRATEGY

(a) Programme Rationale and Philosophy

The Malawi Institute of Education - Brandon University In-Service Teacher Education Project which continues to be in operation in Malawi involves School Heads and Inspectors in the primary education sector of the educational system. The decision to involve this particular group of professionals was influenced by the fact that these persons are more closely associated with the primary schools on a daily or regular basis. The School Inspector, as a professional worker, is in direct contact with schools on a regular basis. The School Head too is in direct contact with teachers in his or her school on a daily basis. If schools are to change, these professionals are the best target group (Setidisho, 1988c).

> The process to improve the quality of primary education
> in Malawi begins with those who are in direct contact
> with teachers on a daily or regular basis. District

Inspectors of Schools and Headmasters were identified as the initial group with whom this responsibility lies.

The District Inspectors of Schools are concerned with ensuring that quality education is maintained by primary schools in each district throughout the country. The work of the District Inspector of Schools is largely professional, although it may include some administrative responsibilities. The professional aspect of the work of the District Inspector of Schools involves, for the most part, guiding and assisting primary school headmasters and teachers in the field; supervising, conferring with and advising teachers; and participating in curriculum development and in-service training programmes. As a representative of the Ministry of Education and Culture, the District Inspector of Schools also assists headmasters and others in the field in interpreting and implementing education policies and programmes.

The Headmaster of a primary school is essentially responsible for the day-to-day management, organization, administration, and instruction within the school. It is his/her responsibility to provide professional supervision and assistance to the teachers within his/her own school and it also is the expectation that he/she will organize and conduct in-service courses for teachers who are, in the main, not only unqualified but also underqualified. (Malawi Institute of Education, 1986; p. 1).

This constitutes the rationale for focusing the MIE-BU In-Service Teacher Project on School Heads and Inspectors. The guiding philosophy has been to train a cadre of professionals who would, in turn, train others.

(b) The Programme-In-Practice

A major goal of the programme is to ensure that the course participants develop appropriate skills in school administration and leadership, inspection and supervision in order to improve

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curriculum processes in the primary education sector (Malawi Institute of Education, 1986). The general objectives are that the participants who enrol and complete the programme should:

(a) Provide effective inspection, supervision and assistance to all professional personnel working within the primary education system.

(b) Become more familiar with the organization, management and administration of primary education in Malawi.

(c) Participate in and contribute to curriculum development activities.

(d) Design, prepare and use educational resource materials of various kinds.

(e) Improve their knowledge of the content of primary school subjects.

(f) Acquire and strengthen their knowledge in the variety of general teaching strategies which are relevant to the primary school teacher in the education system of Malawi. (Malawi Institute of Education, 1986; p.2).

These project goals reflect the concerns of both the organization and the individuals. The first three goals are geared toward organizational changes, whereas the last three correspond to the levels of individual concerns.

(c) **Programme Design**

The training programme lasts for a period of 24 weeks spread over 3 years. There are three residential sessions held at the Malawi Institute of Education at Domasi, with each residential session lasting for a period of 8 weeks. Thus, there is one residential session of 8 weeks at the beginning of the programme;

there is a second one in the middle; and a third at the end. While in attendance at each residential session, participants study specific courses, both half courses (20 contact hours) and full courses (40 contact hours). At the end of a particular course, participants write an examination in that area of study. The examinations are set by individual course instructors. At the end of each residential session, participants return to their work places to apply the newly acquired knowledge and skills.

In between any two residential sessions tuition is provided by way of correspondence and field assignments to be written and submitted for assessment. Further, when the primary schools are in session, the Course Co-ordinator and Institute Staff conduct clinical field supervision of the course participants in their respective work environments. Clinical supervision is a support service aimed at assisting the participants in carrying out their job responsibilities in accordance with the programme objectives (Malawi Institute of Education, 1986). The other function of the field supervision is to monitor and provide feedback on progress made in the writing of field assignments (Malawi Institute of Education, 1986). The rationale of the programme design is best summarized in the words of Halamandaris (1989):

> The programme was divided into three sessions for one
> purpose - to give headmasters and inspectors a chance
> to be on campus for eight weeks to receive the
> instruction that was planned for them. At the same
> time, being away from their families, schools, and
> their duties for more than eight weeks would have been
> somewhat of a hardship for most of these people. For
> this reason, eight weeks was considered to be the

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maximum training period. Another objective of the
project was that, at the completion of the programme,
these people should have an equivalent of one year
university. Therefore, it was calculated that lecture
hours per individual, for all courses, during the three
sessions, should add up to approximately one year of
university training, either at Brandon University or at
the University of Malawi (Halamandaris, 1989).

(d) **The Structure of the Content of the Programme**

Various courses w̶e̶r̶e̶ offered as indicated in the table
below.

TABLE 8
  Malawi   Institute   of   Education   —   Brandon   University
Teacher Project: Course Offerings

Year	Course	Contact Hours
	Educational Administration	20
	Inspection and Supervision	40
I	Educational Psychology	40
	Trends in Primary Education	20
	Study Skills	20
	. . . .	
	Curriculum Development	40
	Audio-Visual Education	20
	In-Service Teacher Education	20
	Any two of the following Primary Curriculum Studies:	
II	Arithmetic	40
	Chichewa	40
	English	40
	Science and Health Education	40
	Agriculture	40
	History and Civics	40
	Geography	40
	Home Economics	40
	. . . .	
	Contemporary Issues in Education	20
	Measurement and Evaluation	20
III	School Organization, Management and Leadership	40
	Research Project in Primary Education	40

    Each of the above courses is structured according to the

format of the Objectives-model. Thus, each course structure

exhibits
~~exhibited~~ the following elements:

(a)	Course title	(f)	Teaching strategies
(b)	Time allocation	(g)	Assignments: residential and field
(c)	General objectives		
		(h)	Assessment
(d)	Specific objectives	(i)	References: text and other readings
(e)	Course content		

A typical example of how courses are structured is exhibited in Appendix C.

It should also be mentioned that there are adequate supplies of course books and guides or handbooks to ensure effective delivery of the courses. Also, the newly developed Library and Resource Centre at Malawi Institute of Education creates further opportunities of sources for additional reading materials and references.

(e) Organization of Teaching and Learning

(i) The Participants

Participants of the programme include the School Heads and Inspectors in the primary education system. Most participants have done 4 years of secondary education and a further 2 years of primary teacher training. This researcher believes that there are a few individuals among the participants who have had only 2 years of secondary education followed by 2 years of teacher training. Participants are organized in classes of 30 to 35. Heads and Inspectors are placed in the same classes although such

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mixing was initially opposed by the Inspectors who emphasized learning in separate classes.

(ii) The Course Tutors

It has already been mentioned that this particular project operates under an institutional co-operation link between Malawi Institute of Education and Brandon University. Therefore, Course Instructors are drawn from both institutions. In subject areas where both institutions are not able to offer tutors, the Project recruits staff from the Malawi Ministry of Education and Culture, University of Malawi, the University of Manitoba and the Manitoba Teachers' Society. All instructors are qualified for the effective implementation of the programme as shown in the following quotation on assessment of staff strength.

> Any project is restricted by its operating budget.
> Staff strength from Brandon University team members and
> from the Malawi Institute of Education staff was
> adequate to meet the needs of the Training for
> Leadership Program/Project. It must be noted that, in
> any project, there is a period of adjustment. That is,
> you start and as the project progresses, very often the
> need for modifying things that did not work the
> previous year becomes apparent. Thus, you make
> adjustments and proceed accordingly. What happened in
> the Brandon/Malawi Project was that faculty members
> brought with them experiences and suggestions that
> enabled difficulties that were encountered the year
> before, to be overcome (Halamandaris, 1989).

(iii) Teaching Strategies Used

A variety of teaching approaches are used. They include use of lectures, team-teaching, demonstrations, class discussions, participants' worksheets, workshops, individual reading

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assignments, excursions, group work and pair work. It should also be pointed out that the use of specific strategies also depends on the nature of the field of study.

(iv) Course Assessment

Both written assignments and tests constitute the bases for course assessment. Each is weighted at a value of 50% (Malawi Institute of Education, 1986). Course assignments are of two types, namely, residential and field assignments. Residential assignments are done while the course participants attend a residential session. On the other hand, field assignments are written while participants are in their work environments. The rationale for assigning participants take-home assignments owes to the fact that the assignments are of a practical nature. They require the course participants to put to use the knowledge, skills and values which they have developed following attendance of a particular residential session. At the completion of each field assignment, each participant mails his or her assignment to the Course Tutor for assessment. Each Tutor, in turn, submits grades of the marked assignments to the Course Co-ordinator who, in turn, informs individuals of their progress.

(f) Field Supervision

The supervision of participants is conducted during the intervening period between any two residential courses (Malawi Institute of Education, 1986). The operation of field

supervision relies on the use of motor vehicles to get from one place to the next. Both fuel costs and car hire charges are exceedingly high in the nations of the Southern Hemisphere. Thus, it is not possible for the Tutors to supervise all the course participants. Thus field supervision is focused only on those participants who have just completed their first residential session.

As already emphasized in the preceding sections, a major purpose of the field supervision is to provide support service to the course participants in supervising teaching and learning, conducting staff meetings and running one-day in-service programmes for teachers in the schools. The supervision model that the Malawi Institute/Brandon University Teacher Project has adopted for use is clinical supervision, as described by Acheson (1980) and Goldhammer (1980). The model works on three principles, namely: pre-conferencing, observation and post-conference. The pre-conferencing phase is basically a planning conference wherein plans are considered and/or jointly developed by both the supervisor and supervisee before implementation of the plan. The process involves detailed discussion of the plan as well as reaching consensus on focus points (Goldhammer, 1980). The next phase of observation involves data collection based on actual implementation of the agreed plan. During this phase, the supervisor jots down specific examples of strengths and weaknesses arising from the plan's implementation. This is

followed by the post-conference phase which is essentially a feedback phase. This is a most crucial phase in that both the supervisor and supervisee co-operatively and collaboratively identify strengths and weaknesses of the area under observation. Following this, they develop an improvement plan which will help the supervisee in future when working on the same professional target. In brief, this is the approach that the Tutors use in supervising participants.

Before a team of Tutors goes out on field supervision, the Course Coordinator prepares a programme of school visits ahead of time, sometimes two or three months in advance. This is to ensure that the participants receive the information in good time. The other reason is to ensure that the Project Administration at the Malawi Institute of Education can make advanced arrangements regarding transportation and accommodation for the supervision team.

The problems encountered during the supervisory visits are mainly of a physical nature. Many of the schools in which the participants work are widely spaced. This makes it difficult to work with more than one participant in a day. In some areas road conditions make it difficult to get to the schools on time. It is even worse to conduct supervision during the rainy season because, in certain areas, bridges are washed away by the rains.

(g)   Formative Evaluations

Formative evaluation is ongoing evaluation which takes place when the programme is in operation. Formative evaluation seeks answers to the question, "Are we doing it right?" (Gephart and Ayers, 1988; p. 27). Answers to this type of question provide useful information to decision makers, leading them to make appropriate programme adjustments. In this respect, formative evaluation is necessary for programme success.

There are three forms of formative evaluations that are conducted during the delivery of the Malawi/Brandon Teacher Programme. The first form consists of bi-weekly meetings at which moment the teaching staff review what transpired during the previous weeks. Areas of need are identified and corrections made.

A second type of formative evaluation is conducted individually by each Tutor. At the end of each course, each Tutor collects data on the participants' reactions to the course. Then, there is a third type of formative evaluation. This type is much more comprehensive both in breadth and in depth. It occurs during the last week of each session. The purpose is to obtain participants' reactions both on the individual courses and the entire operation of the programme. A typical example of a measurement tool that is used is given in Appendix D.

(h) Informal Interactions

Instructor-student interactions do not end with the formal
classroom meetings.   A great deal of interaction occurs outside
of these formal structures.   The Tutors interact with the
participants during tea/coffee or lunch time, in the Instructors'
rooms, in the corridors, in student-faculty sports competitions.
In so doing, the Tutors share in the immediacy of participants'
concerns, involve themselves in idea sharing and ad hoc planning,
develop a wide range of relationships, and gather information and
perspectives that influence their more formal staff development
activities.

(i) Certification

At the end of the three residential sessions, the
Malawi/Brandon Teacher Project issues an award to all successful
candidates.   The award is designated as a Certificate in the
Supervision, Management, Organization, and Administration of
Primary Education (Malawi Institute of Education, 1986).

PROBLEMS FACED IN PROGRAMME OPERATION

This writer believes that, while a programme or project may
be addressed to resolving particular social issues, its operation
cannot occur without facing other problems. Thus, this section
highlights some of the problems encountered during the
implementation of the in-service teacher programme in Malawi.

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(a) The Selection of Participants:

The selection of the participants is entirely undertaken by the Ministry of Education and Culture. It has come to the notice of the project staff that some of the participants are too advanced i⁻ age to benefit from the programme, since the retiring age for public servants in Malawi varies between 50 and 55 years. Thus, the people who are close to retiring have shown a lack of interest in the in-service programme.

(b) Courses

Some courses have been considered difficult by many participants. For example, educational psychology was rated very difficult by the majority of the participants.

Table 9: Rating of Level of Difficulty for Courses
(Scale: 1=Easy, 2=Average, 3= Most Difficult)

COURSE	1	2	3	N
Study skills	25%	72%	3%	114
Educational Administration	20	75	5	114
Educational Psychology	3	33	64	60
Audio-Visual Education	38	51	11	53
Inspection and Supervision	9	52	39	54
. . . .				
. . . .				
. . . .				

Source: Malawi Institute of Education, 1985: A Report On The Eight Week Residential Programme: 3rd June - 2nd August, 1985, p. 28.

The participants did not have appropriate pre-requisite knowledge and skills in the area of study. Although all the students have had 2 years of teacher education, the educational psychology component of their programme was very sketchy and diluted.

The course on In-service Teacher Education which focuses on planning, conducting and evaluating in-service training programmes is considered to be too theoretical in its approaches. It requires that the participants be thoroughly coached in these skills, especially since they are going to conduct their own programmes in their work environments. However, transportation costs make it difficult for the Project Administrators to provide transport to ferry the participants into the local schools where they can conduct needs assessments in order that they can produce prototype plans for in-service education. The participants undertake this practical activity only once. Even then, the activity is hurriedly done because transport is shared among the various groups of participants who go into the local schools.

The course, Projects in Primary Education, causes confusion, both among instructors and students. Projects in Primary Education is not a taught course, rather it is done through independent study. As such, it was expected that a student, along with his/her supervisor, both agree on a topic of study to be pursued by the student. Some instructors feel strongly that the notion of a teacher as a researcher be emphasized and therefore they recommend that the participants should first of all be introduced to elementary research skills, such as how to

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design a simple questionnaire. This is one point of view. Others feel that the material covered under Study Skills is adequate to enable the participants to attack their projects. Such differences in staff perceptions reveal themselves through differences in emphasis that the students receive. Some students have more opportunities for discussion meetings with their project supervisors than others. All this contributes to confusion of the participants.

Expertise is short in the areas of Educational Administration, Organization and Management, and Inspection and Supervision (Setidisho, 1988c).

Team-teaching is one of the approaches that the programme has adopted. Instructors share topics and deliver the topics to the same classes. But when instructors handle different classes and teach similar topics, the students often compare their notes. If the students observe any differences in what they are taught, that causes them concern and confusion because they have to take the same examination at the end of the course. The courses that generate a great deal of confusion as a result of team-teaching are Curriculum Development and Contemporary Issues in Education.

(c) **Field Supervision**

The field supervision component is inadequate since it is only addressed to the first year participants. Both the second

and third year course participants do not have the opportunity of being supervised. Both staffing and finances cannot allow the supervision of all the participants.

When staff go out to supervise the participants, they identify some general or common problems that the students encounter in their work environments. For example, some of the School Heads are not able to supervise their own staff in the schools because of high over-load. Problems of this nature can be discussed at follow-up meetings when the participants have returned to the Institute for their next session. The time-table does not cater to the needs of such follow-up discussions (Malawi Institute of Education, 1985).

(d) The Award

The duration of the in-service is 24 weeks, equally spread over a period of 3 years. Thus, the period of training is equivalent to one year of university study. This has triggered off much talk over the nature of the award that is received at the end of the training. The participants would like to receive a certificate with a diploma status. They have argued that if such training were to be obtained in the United Kingdom, it would have led them to securing a diploma certificate in education.

The above are the kinds of problems that are encountered during the operation of the teacher project. However, it should be emphasized that, wherever possible, adjustments have been made in order to ensure smooth running of the project.

PROGRAMME SUCCESSES

A number of important points can be raised in favour of the
MIE-BU Teacher Project. For example:

> There is consensus that the project has brought about a
> change of attitude to the role of inspection and
> instilled confidence in the Headteachers. Prior to the
> period of training, Inspectors adopted a fault-finding
> style and punitive attitude to the inspection function.
> The headteacher was apprehensive of receiving a visit
> from the Inspector. This feeling of anxiety and
> trepidation has been eliminated and replaced with an
> open and honest attempt at helping the Headteacher
> improve his administration of the school and the
> supervision of teachers. The tools the Inspector now
> uses are dialogue, conferences and a genuine attempt to
> help the subordinate do a better job (Palmer, 1989;
> p. 39).

By implication, the project has improved the performance
skills and values of the School Inspectors which, in turn, have
positively affected the relations between the Inspectors and
School Heads. The same can be claimed for the relations between
the trained Heads and their teaching staff. These aspects have a
potential to affect learning in the primary schools.

The project has also assisted educational policy makers
recognize the value of in-service programmes. For example, the
Ministry of Education and Culture is now very keen to have all
the School Heads and Inspectors undergo re-training of this kind
(Palmer, 1989).

The staff of the Malawi Institute of Education are
principally curriculum developers and writers. They develop
instructional materials for use in the primary education system.

In terms of training, the staff were not trained in primary school methods. Therefore, the appropriateness of the materials that they produce depends very much on the cooperation of their curriculum working committees. The project has made it possible for the staff to know some Heads and Inspectors who can assist in evaluating their instructional materials. In this sense, the programme continues to support the curriculum development functions of the Institute. Further, the involvement of the Institute staff in teaching responsibilities is itself an opportunity of in-service for the staff. Also under the project, two MIE staff have received graduate training in Canadian Universities. This training should make significant contributions to the Malawi educational system.

Last, but not the least, the programme is a medium for international cooperation between the people of Malawi and the people of Canada. Both the Malawians and the Canadians who have visited each of the countries through the project have met and made new acquaintances.

SUMMARY

In conclusion, this chapter has focused on a discussion of the factors that contributed to the establishment of the MIE-BU Teacher In-service Programme under the asupices of CIDA. Further, the chapter has included also a description of the implementation plans of the in-service programme. Since the

project's establishment in 1984, two groups of participants have graduated from the programme. One group completed the programme in 1986 and the other in 1987. This study, therefore, is aimed at assessing the degree of the participants' satisfaction with the in-service programme that they received. A second objective was to find out whether the participants' background factors were significant in determining their perceptions of satisfaction.

CHAPTER III

LITERATURE REVIEW

The research review has been organized into two main sections. The first part of the review addresses important aspects of staff development and in-service activities, whereas the final section gives attention to evaluation methodologies for educational programmes.

I.   STAFF DEVELOPMENT AND IN-SERVICE EDUCATION

The literature on staff development and in-service education is too voluminous to deal with exhaustively. At least two implications are possible. It is possible that the two processes of teacher education have not been properly conducted in the past and, therefore, both educators and researchers have been interested to write on the topics in an effort to put things right. It is also possible that the two topics are complex since they are both living in the sense that they deal with the lives of people, namely, teachers and their clients in the classrooms. Consequently, there is increased attention in these areas in order to improve teacher performance in the classrooms (Smylie, 1988). This has often been stated in the literature as one of the primary functions of staff development and in-service education (Miller and Wolf, 1978; Champagne, 1980; Fenstermacher and Berliner, 1983; Korinck, et. al., 1985; Smylie, 1988). Thus in this review of literature on staff development and in-service

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education, only five areas attract the attention of the researcher. They include, the meanings of the concepts "staff development" and "in-service education", and their four important elements: context, assessment, content, and process. Decision to focus only on the four aspects of staff development and in-service education owes much to the fact that these areas have been extensively researched (Griffin, 1983).

MEANINGS OF CONCEPTS

There is a fair degree of confusion over the meanings of the two terms "staff development" and "in-service education" (Harris, 1989). Some writers feel that the two concepts share similar meanings; hence, they have used the terms interchangeably in the literature. Others believe that a distinction must be made when using the terms. In plain language, the two terms are different. To illustrate the first point, Griffin (1983; p. 414) defines staff development as: "Any systematic attempt to change school personnel". Smylie (1988; p. 1) describes the same term as: "... a systematic attempt to bring about change toward an articulated end". Fenstermacher and Berliner (1983; p. 4) both state that staff development is:

> ... the provision of activities designed to advance
> knowledge, skills, and understanding of teachers in
> ways that lead to changes in their thinking and
> classroom behavior (Fenstermacher and Berliner, 1983;
> p. 4).

It is difficult to detect any grain of evidence regarding differences in meanings between staff development, as stated above, and the following definition of in-service education:

> ... any planned programme of learning opportunities afforded staff members of schools, colleges, or other educational agencies for purposes of improving the performance of the individual in already assigned positions (Harris, 1989; p. 18).

The above definition of in-service education is most closely associated in meaning with the definitions of staff development as suggested by Griffin (1983), Smylie (1988), and Fenstermacher and Berliner (1983). Both sets of definitions stress planning of content or activities in order to attain the goal of improving teaching performance. Such common definitional characteristics have caused some educators to use the terms interchangeably.

As already pointed out, others maintain that there is a distinction in the meanings of the two concepts. For example, some hold the view that staff development is focused on the whole school or some portion of it (such as the primary school) rather than individuals (Goodlad, 1983; Wideen, 1987). This implies that when the activity is focused on individuals, then it is described as in-service education. But this investigator argues that since the whole equals the sum of its parts, then the two terms should be equal in their meanings. However, according to Lieberman (1978; p. 1) staff development:

> ... suggests a different approach to improvement, one that considers the effects of the whole school (the staff) on the individual (the teacher) and the necessity for long-term growth possibilities

(development) (Lieberman, 1978; p. 1).

Thus, staff development activities are more comprehensive in nature than in-service activities. They also require staff members of a school to collaborate in order to bring about change at the local school site. Further, the concept of staff development suggests working with school staff or a portion of it over a long period of time with the necessary supportive conditions (Lieberman, 1978). By implication, in-service education is more specific and short-term. But what is important to recognize is that training, whether initial or in-service, constitutes a part of the process of staff development as exhibited in Figure 3.

Figure 3
In-Service Education as a Part of Staff Development

School Operations

Maintenance Function

CHANGE FUNCTION

PLANNED CHANGE

Unplanned Change

Goals and Objectives

Tools

STAFF DEVELOPMENT

Conditions

Resources

Staffing

TRAINING

Selecting
Assigning
Evaluating
Retiring
Dismissing

IN-SERVICE EDUCATION

Advanced Preparation

IMPROVED EDUCATION
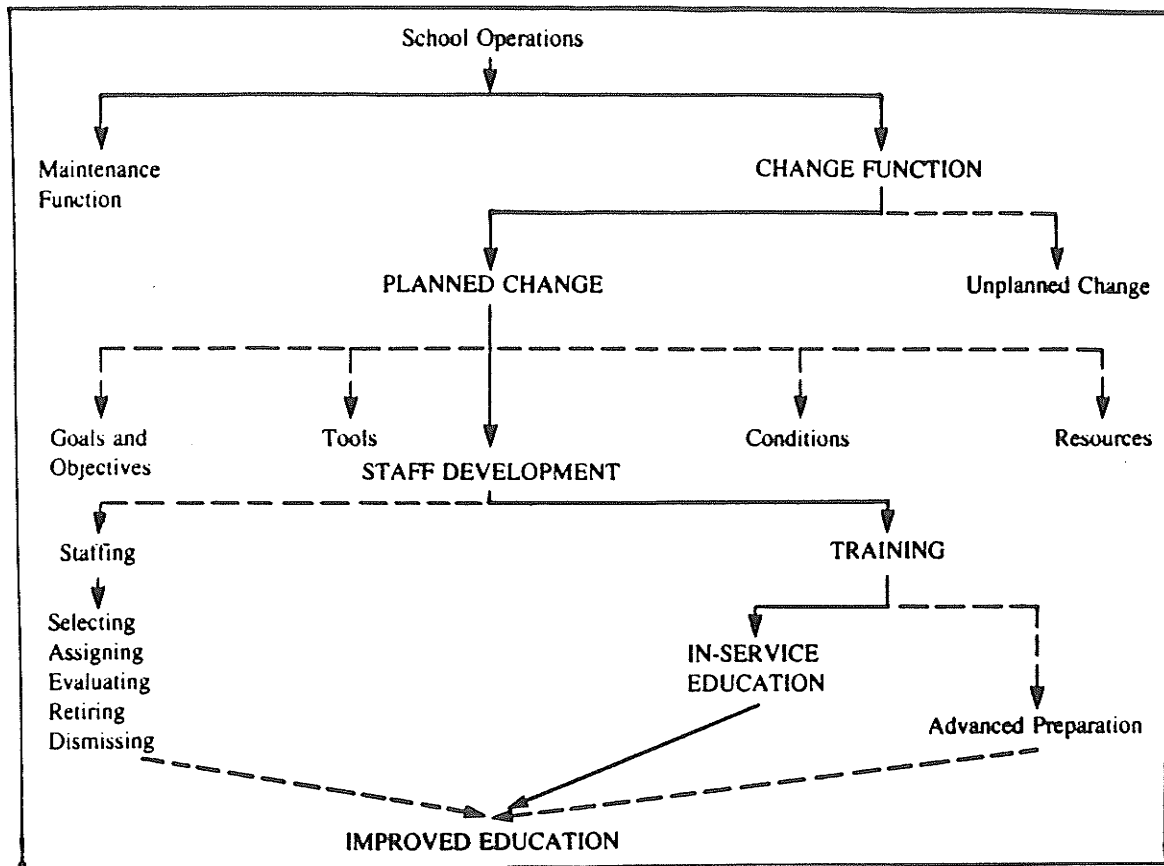
Source: Extracted from Harris, B.M. (1989): In-Service Education for Staff Development. Toronto. Allyn and Bacon, Inc., p. 22.

The flow chart in Figure 3 shows that the school has two important operational functions, namely, a maintenance function and a change function. The maintenance function is an attempt to ensure that school personnel comply with preferred administrative routines. It is also an effort to enable school staff to support the modes of operation of school organizations (Harris, 1989;

Smylie, 1988). On the other hand, the school's change function is aimed at improving the instructional process (Harris, 1989).

Harris argues that change can be either planned or unplanned. According to him, planned changes result in development programmes, whereas unplanned changes take the form of protective arrangements, reactions, coping mechanisms, and even organizational resistance. The latter type of changes cannot be relied on for school improvement for obvious reasons. The outcomes of such unplanned changes are difficult to predict and they are generally negative also (Harris, 1989). Of course, planned changes offer no guarantees as a solution to school improvement. But what is clear is that planning involves a careful identification and selection of change goals and appropriate strategies to assure minimum negative effects. Such a procedure maximizes the chances of improving student learning opportunities.

From the diagram in the figure above, it is evident that, within the context of planned change, there are five possible approaches to instructional improvement for enhancing student learning. These include the improvement of instructional goals and objectives, instructional resources that are provided, the tools for instruction, the working conditions within which teaching and learning occur, and staff performance (Harris, 1989). While the first four approaches are essential for instructional improvement, the improvement in staff performance (which is synonymous with staff development) is a key factor in

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promoting student learning.

Further, the framework suggests that staff development has two components. One aspect of it is referred to as staffing, which according to Harris (1989; p. 21) "involves an array of endeavors that determines who serves, where, and when." This implies providing the best person in the right assignment at the appropriate time for school organizational development. It also involves the supervision and evaluation of the instructional process in order to enable teachers to grow so that they can interact with clients most effectively. It involves building norms of collegiality among the school staff so that they can all work towards a common goal of school improvement (Harris, 1987; 1983).

The other component of staff development involves two kinds of training: in-service education and advanced preparation. The latter is commonly referred to as pre-service training. In-service education is aimed at improving the performance of individual teachers already in teaching assignments. On the other hand, advanced preparation relates to preparation for new job assignments. Thus, advanced preparation is closely associated with manpower planning.

The above paragraphs have focused on the nature of and relationship between staff development and in-service education. Staff development is therefore a term or concept which encompasses in-service education as well. Thus, in dealing with

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the literature review on staff development and in-service education, it is adequate to use the term "staff development" only, since the latter also includes in-service education. As pointed out previously, the rest of this section of the research literature review pays attention to the four important elements of staff development. These include context, assessment, content, and process.

CONTEXT

Griffin (1987; p. 19) states that: "Any activity, personal or professional, is affected, in some measure by the context in which it takes place." This means the design of staff development programmes should carefully consider contextual factors in order to contribute to the success of such programmes. Simply stated, context refers to the characteristics of the setting in which staff development occurs. These characteristics may be physical and/or organizational properties of the setting. Context may also include the influence operating in a setting (Griffin, 1983). A great deal of research evidence suggests the central role of contextual factors in influencing and determining staff development activities. However, before citing the relevant literature on contextual factors that either promote or impede staff development efforts, it is necessary to clarify the meanings of two terms which are often used in discussions of context as it relates to staff development. The two terms are "innovation" and "implementation". In this research, innovation

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refers to a change effort likely to contribute to school improvement which staff development implies. Implementation is the interaction between a change effort (innovation) and its setting (Berman, 1981). In other words, implementation refers to the diffusion of innovative ideas developed through staff development.

The literature suggests that there are two main groups of contextual factors which affect the educational change process through staff development. These include the larger social-context factors and those factors operating in the institutional setting (Berman, 1981; Fullan, 1981; Griffin, 1987; 1983). The larger social-context factors are factors in society which bear some direct relationship to staff development programmes since there are interactions between the teaching and learning processes in school organizations and the wider society. On the other hand, the institutional factors imply school characteristics that exert strong influence on staff development efforts.

THE LARGER SOCIAL-CONTEXT FACTORS

Griffin's (1987) five social-contextual factors are considered for this discussion. They are, namely, state or government regulations, ideological climate, available technical knowledge, linkage with other systems, and reputation of teachers and schools.

Griffin reports that government expectations, expressed as policy statements or directives, are powerful instruments for the introduction and implementation of staff development activities in school settings. The state, through the department or ministry of education, can pass legislation that requires teachers' involvement in specific staff development programmes. For example, the government may introduce multi-cultural studies in the school system or it may recommend the incorporation of handicapped students into regular classrooms. Both of these examples are good reasons for schools to participate in staff training programmes in order to meet government expectations. But, at the same time, the government seldom gives schools additional funds for the operation of staff development programmes (Griffin, 1987). Thus, the school administrators plan and deliver such training programmes on thin budgets. This has two possible consequences. Such programmes may not be conducted effectively since a lack of funding implies that material resources (in the form of relevant instructional materials) cannot easily be obtained for use during staff development. It also implies that the school administrator is forced to move away funds allocated for other competing staff development programmes for purposes of implementing government mandates. Thus, other well planned or established programmes suffer at the expense of those programmes with mandates behind them.

Ideology is another powerful influence on schools and staff development. The term, ideology, refers to the way the larger

society perceives   the essential elements of schooling, such

as   purposes,   instructional systems and students' learning

outcomes (Goodland and Richter, 1966).   If the purposes ꟷ

schooling are to promote conservatism, then change efforts

through staff development may not be possible to put into

practice.   For   example,   in discussing problems associated with

the   transfer   of educational innovation in the developing world,

Deines (1989) states that:

> Another problem has to do with the attitudes of the
> elites   in   most   current   developing nations.   They
> achieved their own positions as a result of working
> inside the current educational system. To suggest that
> this system should be altered is to attack their own
> position and self-worth. This is a partial explanation
> of why countries far removed from the colonial powers
> in space and substance continue to insist on European
> educational curricula and standards   (Deines, 1989;
> p. 8).

Thus, if the prevailing attitudes of the authorities regarding

educational change are not favourable, then it is not possible

for such change efforts to occur.   On the other hand, if a

society is reform-oriented, it is then possible for staff

development programmes to be supported. For example, in North

America there has been and still is a great concern for

increasing student performance in the school systems.   This

public concern led to the "effective teaching" movement in the

early 70's (Griffin, 1987). According to Griffin (p. 23) such a

movement ... "is having a marked influence upon staff development

programs". The research results on teaching become the content

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of staff development activities. School districts provide funds for these efforts because of their potential to make positive differences in student learning (Griffin, 1987).

Another important factor affecting staff development programmes, according to Griffin, is the availability and accessibility of technical knowledge. Technical knowledge has two bases: scientific and non-scientific. The former refers to research as source of technical knowledge. As already noted in the above paragraph, increased interest in research on teaching has contributed greatly toward staff development programmes. Non-scientific technical knowledge implies teachers' beliefs or values regarding the process of teaching and learning. Thus, teachers and others respond to staff development activities because they are persuaded by their own value systems since the latter represent proposals for action. This is how the availability of technical knowledge is influential upon staff development programmes (Griffin, 1987).

It is also important to remember that educational establishments are linked with other systems as well. This linkage has the potential to influence change programmes in school systems. For example, primary schools are linked with secondary schools which, in turn, are connected to institutions of higher learning, such as universities. At the same time, it is known that universities are knowledge production institutions, whereas secondary and primary institutions are associated with

knowledge utilization (Griffin, 1987). These interactive interests can heavily influence staff development programmes, especially in the secondary and primary educational sectors. Knowledge that is produced in the higher institutions of learning can influence both secondary and primary institutions to plan and conduct training programmes for teachers to ensure that the newly founded knowledge is effectively used to promote student learning.

It is also possible to look at the influence of the systems approach on staff development in this way. Changes in technological development taking place in society can force school organizations to reform their curricula. In turn, curricular reforms can lead schools to embark on staff development programmes in order to ascertain that the new educational contents are effectively delivered. There are many other examples which can be cited to support the view that linkage with other systems can heavily influence staff development.

Last, Griffin (1987) points out that the reputational status of teachers and schools can affect staff development training programmes for good or ill. For example, if the public and other educators share the view that schools can make a difference in improving student learning outcomes, it is very possible for the public to support school reform efforts through the provision of adequate financial resources. One aspect of the reform process is obviously staff development. A lack of supportive attitude

also suggests the contrary. Thus, a school's community may not provide adequate funding to enable the successful operation of training programmes aimed at teacher growth or development.

"Teaching as a profession" has long been a topic of heated debate among educators and even the general public. Many educators share the feeling that teaching is not a profession. Such perceptions greatly undermine the autonomy of teachers. Thus, historically, a great deal of staff training programmes have been planned and developed along the "deficit model" (Griffin, 1987; Burrello and Orbaugh, 1982). The deficit model of training is not only a make up for shortcomings during pre-service training, it also emphasizes, rather indirectly, that teachers are not knowledgeable enough to decide or select topics that are appropriate for in-serivce education. Thus, key advocates of the deficit perspective often select topics or content to be delivered during a staff training programme. While this approach to programme development is dehumanizing, it is also recognized as a possible barrier to effective training (Burrells and Orbaugh, 1982; Dawson, 1978). A lack of involvement in decision-making regarding the content of in-service training can very well make it difficult for transfer of training to occur since it implies that the needs of the participants have not been addressed.

The above are some of the societal forces more likely to influence staff development activities. It is important that

staff developers understand these societal factors so that, where possible, they can manipulate them for the benefit of school improvement. However, it is essential that school leaders gain an in-depth understanding of the school level factors that research has demonstrated to have an impact on staff development programmes. In so doing, they can have direct interaction with the variables in order to promote the change process.

THE INSTITUTIONAL VARIABLES

Many writers agree that the school setting is the proper site for operating staff development activities. At the same time, research has demonstrated that there are many variables that appear to be instrumental in promoting or hindering the success of staff development at the local school site. Four factors are discussed. They include: history of innovative attempts, organizational ethos, leadership of both the principal and the central district administration, and teacher attributes.

(a) History of Innovative Attempts

There is evidence in the literature that many projects aimed at teacher growth and school improvement fail (Goodlad and Klein, 1970; Charters and Pellegrin, 1973; Gross, et al., 1971; Silberman, 1970; Sarason, 1971). Experiences with project failure imply wasted resources (in the form of time, money, and human talent), frustration on the part of those involved in the project (both participants and project organizers alike), and

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growing disillusionment (Fullan, 1981). According to Fullan, the more the participants have had negative experiences with attempts to change schools, the more negative they will be with the next change effort they encounter. Teachers may participate in a staff development programme as required by law, but it will be unlikely that they will implement the innovative ideas in their classroom settings. For example, Barth (1972) carried out a case study in the United States of America aimed at changing the school structure and the behaviour of the teaching staff of an inner-city school from a traditional instructional and organizational approach to an open-educational approach. Barth reports that the attempts failed, despite the strong commitment and the goodwill of those involved in the change process. This failure was explained, in part, by acknowledging that the change agents (who were university personnel and students) lacked understanding of the history of the school organization with respect to innovative projects. This demonstrates the need to first understand the quality of participants' experiences with previous innovations before introducing new programmes for school improvement.

(b) Organizational Ethos

Staff development organizers need to understand that schools are organizations with special characteristics which have implications for determining the success or failure of staff development programmes. One of the chief elements to be

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described in this section is organizational ethos.

Every school has an ethos (Griffin, 1987). Some schools are good working environments wherein collegiality or team-spirit is encouraged by the leadership. Consequently, teachers work together, visit each other's classrooms, and hold professional discussions aimed at improving student learning outcomes. Other schools do just the opposite: they are harsh and punishing and the teachers working in them are isolated from each other, (Cohen and March, 1974; Weick, 1976) and open communication among the teaching staff is non-existent. The available literature (Griffin, 1987; Berman and McLaughlin, 1979; Galanter, 1978) suggests that schools which exhibit such organizational ethos as collegiality, open communication, support and help, interaction and morale among all school staff, including the principal, are more receptive and supportive of staff development activities than schools without such properties. Thus, the planning of staff development programmes should carefully consider a school's culture so that plans for the intended change are carried out effectively.

(c) <u>Leadership</u>

Two aspects of leadership that are related to staff development activities are discussed here: the leadership of the school principal and that of the central district administration.

The role of the principal is central in school-based staff

development programmes (Berman, 1981; Griffin, 1987). Research
has demonstrated that school principals who support staff
development activities for school improvement display the
following behaviours:

1. They create opportunities of dialogue among and with
staff (Miller and Wolf, 1978). In so doing, they are able to
identify the teachers' present levels of concerns appropriate for
staff development.

2. They are familiar with advances in research knowledge
on teaching (Griffin, 1987) and thus they are able to link
teachers with such knowledge. This enables teachers to grow.

3. They have a clear sense of a school's mission (Murphy
and Hollinger, 1985) which they are able to share with the entire
teaching staff. Goal clarity and consensus, which the above
implies, enables staff to co-operate in decisions regarding staff
development.

4. They are willing to involve staff participation in
school policies and plans (Larkin, 1984). This aspect helps to
build a sense of community among staff (Murphy and Hollinger,
1985). This is an important pre-condition for staff development
since it implies shared values, and support and help.

5. When a staff development activity has been adopted,
these principals involve teachers and resource persons in doing
staff development (Griffin, 1987). Involvement of staff as
resources in operating school change programmes enhances
collegiality and open communication among school staff. Support

and help becomes the norm of the school. According to Rosenhaltz (1985) such collaboration leads to school success.

6.   Principals who support staff development programmes pay careful attention to the recruitment of teachers (Rosenholtz, 1985) because school-level staff development depends, in large part, on the type of teachers that a principal has selected for his or her school.

7.   These principals show great interest in what goes on in classrooms. Consequently, they are often available for the supervision and facilitation of teachers' work. According to Bossert et al., (1982), the process of supervision is a direct source of pressure and direction for teacher change since it implies assessment of teacher performance and suggestions for improvement.

8.   The principals who support teacher change encourage the development of interpersonal relationships among teaching staff. Cooperation and collegiality are encouraged. According to Anderson (1982), these aspects provide sources of psychological support for the teachers' efforts to improve.

9.   These principals also encourage teacher experimentation with new teaching strategies. Encouragement of experimentation enables teachers to develop a spirit of continuous self-improvement which, in turn, affects student learning outcomes.

The above list is not meant to be exhaustive. What is important to note is the fact that the school principal's

position is a key factor in school improvement efforts. At the same time, it is important to understand that district or nation-wide staff development activities will have varying degrees of success because school principals do not share the same characteristics.

The other important aspect of leadership is the role of the central district administration. A great deal of research stresses the point that, all other things being equal, the direct support of the central district administrators is essential to the successful implementation of school change programmes (Daft and Becker, 1978; Emrick and Peterson, 1978; Rosenblum and Louis, 1979). However, Berman and McLaughlin (1977) argue that the support of the central administrators should not simply take the form of general endorsement of the programme, but rather the central administration should demonstrate active interest and knowledge of the programme. They should also communicate the goals of the intended teacher change programme so that everyone is clear. In so doing, they also communicate a sense of caring which, in turn, may drive school staff to work toward the goals of the programme.

(d) Teacher Attributes

Teacher attributes are an important set of factors which determine the success or failure of change programmes in educational institutions. This section focuses on a discussion of six teacher characteristics considered relevant to staff

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development in schools.

First, stability of a teaching staff is considered an important element for school success (Rosenholtz, 1985). Thus, it can be assumed that staff development would also benefit from a teaching staff that is cohesive and stable. A staff that is cohesive and stable implies that the members share a common purpose. This sense of community would make it possible for the school staff to engage in staff development programmes at the school level.

Second, Fuller and Brown (1975) report that teachers undergo three periods of professional development. During the first period, teachers are concerned with their entry into the new school environment, particularly with how to adapt to the environment. The next period is concerned with how they discharge their duties as teachers and finally, their concern is with impact on teaching and learning. Thus, knowledge of the various psychological states of teachers may considerably be helpful to the staff developer in that appropriate plans may be developed for specific teacher groups.

Third, Lam (1979) points out that the degree of previous knowledge of the concept that the staff development programme intends to develop in the minds of participants, is an important factor in determining the success or failure of transfer of learning to the classroom setting. The argument is simple. Previous knowledge implies that the in-service participant has

necessary pre-requisites which enable new or fresh ideas to anchor - thus making it possible for meaningful learning to occur. This emphasizes the need for ongoing staff development programmes.

Fourth, according to Joyce and Showers (1988), teachers fall into three categories with respect to levels of activity. An understanding of these categories is useful in planning staff development programmes. The first category consists of mature high-activity people who, according to Joyce and Showers, are "gourmet omnivores". The gourmet omnivores initiate ideas and always find ways to influence the decision-makers. They have a high level of awareness and they also strive to learn all they can about their profession. Then there is a second category of persons who Joyce and Showers describe as "passive consumers". Passive consumers display a high degree of dependence on the environment. Their level of activity depends on who they are with. If they are in the company of other passive consumers, they are relatively inactive. The third category consists of "reticent consumers" (Joyce and Showers, 198). These are reluctant to interact positively with the immediate social context. Some extremists even reject opportunities that involve participatory decision-making. In the context of staff development programmes, the following implications may be noted:

1.   Staff development activities, whether district-wide or school-based, cannot be achieved with equal success because individual teachers differ in their levels of activity. As

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already noted, some teachers are more active than others. Some are more cooperative and others are not. These characteristics can contribute to success or failure of school improvement programmes such as staff development.

2. The knowledge that teachers differ in their levels of activity should help staff developers plan and conduct effective staff development programmes. For example, a grasp of this knowledge may assist school leaders to listen to both what the reticent consumers and the passive consumers have to say during programme planning. Such knowledge may also influence staff developers to adopt particular teaching strategies during programme operation in order to promote participant learning.

Last, Smylie (1988) acknowledges that the characteristics of the classroom environment can influence teacher change through staff development. Smylie believes that class size can have an impact on teacher behaviour and change. For example, it is believed that large classes can limit teacher experimentation with new ideas developed during an in-service workshop. Another important variable which can act as a barrier to teacher change, especially for schools in the developing world, is lack of instructional materials in classrooms. The absence of such supportive teaching and learning materials may also limit opportunities for teacher experimentation with innovative ideas learned during an in-service programme. Lastly, it is also known from research that the concentration of low-achieving students in

What is clear from the above is that in-service functions have not been properly carried out. In-service activities have been imposed on teachers without paying particular attention to teachers' needs. Imposition of staff development activities, such as in-service activities, only contributes to unsuccessful programmes (Griffin, 1987) in that for people to learn and then be able to transfer the learning to the workplace, it is absolutely necessary that they first find meaning in what is to be learned. This is the principle of meaningful learning. When topics for in-service are specified by an outside group, it is very unlikely that the teachers' real needs will be met. Thus, with such a procedure, it is reasonable to assume that the in-service activity will not have any impact on the teachers.

To contribute to the success of in-service activities, the staff developer should carefully consider the needs or concerns of participants. According to Burrello and Orbaugh (1982), consideration of participants' needs helps to develop in the minds of the participants feelings of ownership of the activity. This makes it easier for learning to occur since it implies that participants will be dealing with topics of their concern during the in-service activity. Thus, they will be motivated to learn and it is also possible that what they learn during the programme will be applied in the work setting.

Swenson (1981) suggests some useful guidelines for conducting effective needs assessment:

a classroom can affect teacher change (Smylie, 1988) through staff development efforts. There is a connection between student achievement and teacher expectation. For example, low student achievement is known to cause low teacher expectation. Thus, it is reasonable to assume that if teachers believe that low-achieving students will not improve, they may not attempt to change their classroom practices.

In summary, the institutional variables that are related to staff development and change efforts, for good or ill, include: (1) the history of innovative attempts, (2) the school organizational ethos, (3) leadership by the school principal and the central district administration, and (4) teacher attributes.

ASSESSMENT

The second key component of staff development is needs assessment. However, Dawson (1978; p. 50) makes this comment:

> ...In-service education activities which are imposed on teachers from above, whether by well-intentioned school board officials or through the auspices of a university, are destined for failure if they do not take into account the teachers' perceptions of reality. If some group external to the people for whom the in-service training is designed decides a priori what teachers need, without taking account of the teachers' own view of what is relevant to them, then the chances are extremely good that teachers will ignore the in-service activity. They may attend. They may even get involved to a certain degree, but if the activities do not deal directly with the teachers' perceived reality, the activities will have little permanent effect on the teachers. Yet that has been the nature of a great deal of in-service functions (Dawson, 1978; p. 50).

1. Use of Multiple Methods

Several measures should be used when conducting needs assessment. They should include the analysis of existing information such as budget documents, organizational goals and test scores. These three aspects provide important background data that can assist in planning the intended activity. For example, consideration of the budget may help to determine the scope of the activity. Organizational goals provide a yard-stick for re-assessing participants' needs, and the test scores can help assess the abilities of the participants. Other methods that can be used are interviews, observations, questionnaire surveys, group discussions and evaluation conferences (Swenson, 1981). The purpose is to obtain as much data as possible regarding what they wish to learn.

2. Attention to Process

In addition to assessing what participants are interested to learn, it is also important to obtain information on how participants best learn. Questionnaires may be used for the purpose. The staff developer may also do a research review on adult learning.

3. Provision for Feedback

After the needs assessment data have been gathered, they are processed and, then reported to the respondents.

4. Use of Evaluation as Further Assessment

The evaluations that are gathered to judge the impact of an in-service programme or other forms of staff development are used

as assessment information for future programmes.

CONTENT

The staff development literature does not include much research related to content decision-making for a sound programme (Griffin, 1983). Hence, this section is brief.

1.   The content for a staff development programme should be knowledge-based (Griffin, 1987) to be of real use in improving teaching practices for promoting student learning outcomes. This, therefore, suggests that the staff developers should select content that is verified by research (De Roche, 1987).

2.   (Burrello and Orbough, (1982) point out that the content for staff development should be directed toward changing teaching, not student behaviour. This suggestion is logical because, under special conditions, changing teaching practices can produce improved student learning which, in turn, can lead to change in teachers' beliefs and attitudes (Guskey, 1986). The latter type of change is an example of a support system for greater interest in staff development activities at the local school site.

3.   Holly and Blackman (1981) recommend that the programme activities should be personally relevant. This is why every staff development activity should be preceded by needs assessment.   The purpose is to assure personal relevance which,

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according to learning theory, is associated with meaningful learning.

4. Pratt (1980) suggests the use of the Concerns-Based Adoption Model (CBAM), developed by Hall and associates at the University of Texas, not only as a delivery mechanism of staff development activities, but also as an aspect of the content of such programmes. Central in CBAM is the concept of "concerns" and motivations of teachers as they deal with an innovation. According to this model, people appear to move through 7 "stages of concern" when they are involved in an innovative programme. The first stage (stage 0) is the awareness-concern stage which indicates that the innovation or programme is not of concern. Perhaps people have heard very little about the innovation and do not perceive that it has any important implications for them or their work. The second stage (stage 1) is the information-concerns stage. At this stage, people are concerned about obtaining more information about the innovation. The interest is focused on learning the general aspects of the innovation (Hall, 1979). Third, is the personal-concerns stage (stage 2). People with these concerns perceive the innovation as a personal threat. They are uncertain about the demands of the innovation, their inadequacy to meet those demands, and their role with the change effort. The fourth stage (stage 3) is the management-concerns stage. At this stage, people are concerned about the processes and tasks of using the innovation. The fifth stage (stage 4) is referred to as the consequence-concerns stage. These are the

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first of the impact concerns (Pratt, 1980; Hall, 1979).
Attention is focused on how the change efforts improve student
learning outcomes. The sixth stage (stage 5) is the
collaboration-concerns. Persons with these concerns are
concerned about coordination and cooperation with others
regarding the use of the innovative ideas. Last, is the
refocusing-concerns stage (stage 6). Persons with these concerns
have already assessed the effectiveness of the innovation in
promoting student learning outcomes. They are convinced that
other approaches can yield better results in terms of improving
student learning achievement. Thus, at this stage the focus is
on exploration of alternative strategies that can exert greater
impact on learning.

At least two important benefits can be derived from using
the Concerns-Based Adoption Model as an aspect of content for
staff development. Learning about the various stages of concern
associated with CBAM may provide programme participants with a
general psychological orientation to change efforts. This does
not only enhance awareness of the adoption process, but it also
builds up confidence in participants regarding effective
implementation of a change programme, since discussion of each
stage of concern focuses on both problems and possible solutions.
Such knowledge should help reduce barriers to implementation.
Last, programme participants who are exposed to CBAM should be
able to understand that change is a process, not an event, (Hall,

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1979). Thus it is unreasonable to assume that people will change immediately following their interaction with an innovation.

PROCESS

The term "process" refers to a core of activities or delivery systems (Griffin, 1983). A great deal of research evidence has shown that the following processes are effective means to successful staff development programmes. However, these suggestions are not in a particular order.

1. Staff development programmes should take account of developmental theories of learning (Berman and Friederwitzer, 1981). For example, according to the Piagetian Learning Theory, learning takes place through the interaction of the learner with the materials, peers and the teacher. Further, learning is described as a developmental process. Thus, each new concept builds upon previously existing concepts. This suggests that staff developers should create opportunities that involve teachers in activity-oriented experiences which encourage peer interaction in order to learn relevant information and also stimulate their growth (Holly and Blackman, 1981).

2. Staff training programmes should include the following important elements: (a) theory, (b) demonstration, (c) practice, (d) feedback, and (e) coaching (Joyce and Showers, 1980; Collins, 1981; Fullan, 1982). The trainer should first describe the skill or strategy to be learned. The purpose is to enable trainees to understand why it is important to learn the skill. This is

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followed by opportunities for individual skill practice under the close supervision of the trainer. Practice is a means to develop confidence (Mazzarella, 1980). During the practice sessions, the trainer provides the trainee with feedback on performance. When the participant is back to the work setting, he or she receives further supervisory assistance from the trainer. This is referred to as coaching.

3. Follow-up or follow-through is also considered an important element of successful staff development programmes (Fullan, 1982). A series of several follow-up sessions with intervals between should be planned and implemented. According to Fullan, this is a much more powerful strategy which can contribute to the effective implementation of a programme.

4. The use of teachers to train other teachers has been shown to be an effective means to successful staff training programmes (Griffin, 1983). Thus, it is important that staff development organizers plan to use teachers as resource persons in the delivery of such programmes.

5. Teachers or participants should be provided with release time in order to participate in training programmes. According to Griffin, the provision of release time is closely associated with effective staff development.

Conclusion

This section of the literature review has focused on staff development (including in-service education). The subject is wide and therefore it was considered appropriate to focus attention on only four main aspects of the topic: context, assessment, content, and process. As already pointed out in previous discussions, staff development efforts can be enhanced if the staff developer pays careful attention to all the above aspects. The following section deals with evaluation methodologies for educational programmes.

II. METHODOLOGIES FOR EVALUATION

The focus of the present section is on methodologies for evaluation and deals especially with ways of collecting data for evaluation (Henderson, 1978). However, before this objective is achieved, it is necessary to begin with a quick over-view of the nature of evaluation. This author believes that there are certain basic concepts of evaluation that are worth explaining before engaging in discussions of the many different ways of evaluating educational programmes.

THE NATURE AND APPROACHES TO EVALUATION

Evaluation has been described as "the systematic process of collecting and analyzing data in order to make decisions" (Gay, 1987; p.7). Implicit in this definition are several important elements which distinguish between evaluation and research. The phrase "...systematic process of collecting and analyzing data..." emphasizes both orderliness and application of scientific methods in data gathering. Both of these elements are shared by conventional research as well (Weiss, 1972; Borg and Gall, 1983). The process of data analysis leads to certain types of findings. These findings are forms of knowledge. Knowledge generation is a common element in both evaluation and research studies. However, it should be underscored that evaluation goes further than the mere construction of knowledge. This is

evident in Gay's definition of evaluation. Evaluation emphasizes the application of knowledge to make practical decisions in order to improve an educational or other programme (Wolf, 1984; Borg and Gall, 1983; Rossi, et al., 1979). This is consistent with the orientations of some curriculum theorists who have argued that knowledge should have a practical value (Schubert, 1986; Kliebard, 1970; Grundy, 1987; Stenhouse, 1975). In short, evaluation is decision-oriented (Anderson and Ball, 1978; Borg and Gall, 1983; Worthen and Sanders, 1987). In this respect, evaluation has a direct social utility (Worthen and Sanders, 1987). This element motivates the evaluator to engage in evaluation studies (Anderson and Ball 1978; Worthen and Sanders, 1987; 1973). On the other hand, knowledge that is created by conventional research studies need not offer "immediate practical payoff" (Anderson and Ball, 1978; p. 9).

It has been noted that evaluation is decision-centred. Decision-centredness carries the notion that evaluation is specific both in time and geography. Evaluation must adhere to time if it is to be of any use to the decision-makers (Worthen and Sanders, 1987). Therefore, the evaluator must quickly provide data for decision-making. In this respect, the evaluator has limited autonomy (Worthern and Sanders, 1987; 1973). By contrast, the conventional researcher adheres to his/her own time-table. The researcher enjoys more autonomy than his/her counterpart because his/her objective is to satisfy curiosity.

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The researcher's interest is often in hypothesis testing. Further, knowledge that is generated through evaluation studies is situation-specific. It is focused at resolving issues connected with a particular educational programme involving a particular set of participants at a particular site. It cannot be generalized to other similar situations. According to Wolf (1984), one of the reasons why there are few journals that publicize evaluation studies is that evaluations do not yield knowledge that is general in nature "...to warrant widespread dissemination" (Wolf, 1984; p.9). It is further claimed that such knowledge is short of explanatory power to enable generalizations and predictions to be made (Anderson, et al., 1973) because it is in the form of descriptions of specific instances. This is what is meant by describing evaluation as being specific in geography. On the other hand, research produces knowledge which is often generalizable (Wolf, 1984; Borg and Gall, 1983; Anderson and Ball, 1978; Anderson, et al., 1973). Such knowledge is widely applicable. It has high explanatory power.

This view of research has come under attack from such writers as Bowers (1976; 1974), Apple and Weis (1986), Giroux, et al., (1981) and Schubert (1986). They argue that such research does not create space for change in education. It is very much responsible for the banking concept of education (Bowers, 1976)

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which literally means education for the reproduction of knowledge. Moreover, Cronbach (in Patton, 1987) argues that generalizations decay over a period of time. Nevertheless, generalizability is seen as being a major distinction between evaluation and research (Anderson, et al., 1973; Wolf, 1984; Borg and Gall, 1983).

According to writers such as Borg and Gall (1983), the main differences between evaluation and research are to be found in their purposes as well as the extent to which their results can be generalized. These are the two chief distinctions between the two forms of inquiry. But what should be emphasized is the fact that evaluation, as a form of inquiry, has addressed itself to "...better ways of knowing" (Diesing, 1971; p. 291) in order to improve educational or other programmes. This intent is evident from the different meanings and purposes attached to evaluation. Many writers in the field of educational evaluation have different perspectives regarding evaluation as a form of inquiry. These differences do not represent confusion, but rather they represent interest in exploring better ways of improving educational programmes. The different positions that educators have taken are in the form of models.

Tyler (1950) and Bloom, et al., (1971) conceive evaluation as the process of assessing client progress with respect to programme objectives. In this view, student progress should be compared with prescribed programme objectives. This approach to

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evaluation has been described as goal-oriented evaluation (Herman et al., 1987). But it has been argued that the approach is restrictive. Any learning situation yields unintended effects also (Worthen and Sanders, 1987). This understanding convinced Scriven (1972) to develop the model now known as goal-free evaluation. According to this evaluation model, the evaluative inquiry goes beyond a narrow focus on achieving programme goals. Evaluation assesses other unintended effects as well – hence, the term, goal free. Worthen and Sanders (1987; p. 75) point out the following characteristics of goal-free evaluation:

- The evaluator purposefully avoids becoming aware of the programme goals.

- Predetermined goals are not permitted to narrow the focus of the evaluation study.

- Goal-free evaluation focuses on actual outcomes rather than intended program outcomes.

- The goal-free evaluation increases the likelihood that unanticipated side effects will be noted (Worthen and Saunders, 1987; p. 75).

There is yet a third evaluation position which emphasizes a systems approach to evaluation in order to aid decision. This approach is variously known as decision-oriented evaluation (Herman, et al. 1987) or management-oriented evaluation (Worthen and Sanders, 1987). The knowledge that is generated from this approach is used to aid decision regarding inputs, processes and outputs of a programme. The names that are closely associated

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with the decision-oriented approach are Stufflebeam and Alkin (Worthen and Sanders, 1987).

Such writers as Wolf (1975) have stated that the process of evaluation should be based on the presentation of contrasting views about a programme. Wolf believes that such an evaluation process can produce the truth. This position has been labelled advocacy-adversary evaluation.

Patton (1986) and Alkin, et al., (1979) emphasize that evaluation should be carefully conducted so that it yields knowledge which can be used by specific stakeholders and users. Emphasis is on utilization of evaluation findings. Accordingly, such an approach has given rise to what is now known as utilization-focused model of evaluation (Herman et al., 1987).

The use of professional expertise in evaluation has been recognized for a long time (Worthen and Sanders, 1987). In this approach, experts are hired to judge the merit of an educational programme. Such an approach to evaluation is called expertise-oriented evaluation model (Worthen and Sanders, 1987).

Some of the above approaches have been criticized as being too mechanistic and insensitive (Worthen and Sanders, 1987). The goal-oriented model is a good example of an evaluation approach that is too mechanistic and insensitive. Adherence to goals implies that no attention is given to the context of a programme. Evaluations should take considerations of the values of the programme participants as well as the total situation in which

the programme is operated. This means that the evaluator should step into the scene and become a part of it. When this occurs, the evaluator really comprehends the operation of the programme that he/she is evaluating. This approach to programme evaluation is termed naturalistic and participant-oriented evaluation. Stake is the name that is associated with this approach (Worthen and Sanders, 1987; Herman, et al., 1987).

Each of the above models has its particular strengths and limitations. What the foregoing suggests is the fact that evaluation as a field of inquiry is dynamic, aimed at generating practical knowledge to implement change in educational or other social programmes.

USES OF EVALUATION

These models have influenced certain types of evaluations in programme development. In turn, these evaluation types have demanded certain types of evaluation procedures in terms of methodologies. First, a look at the different types of evaluation used as a programme develops.

There are different types of evaluation research suggested in the literature (Borg and Gall, 1983; Perkins, 1977, Rossi, et al., 1979; Patton, 1982; Worthen and Sanders, 1987; Pancer and Westhues, 1989). Alkin and Fitz-Gibbon (1975) have produced a theoretical scheme that relates evaluation activities to stages

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of programme development. Such a scheme is given in Table 10. These educators suggest that evaluation falls into three main categories, namely: pre-formative, formative and summative evaluation. Each major category is further divided into specific evaluation types as shown in Table 10 below.

TABLE 10
The Relationships Between Evaluation Activities
and The Stages of A Developing Programme

PROGRAMME STAGES	EVALUATION STAGES	
	PRE-FORMATIVE EVALUATION	
Initial Determination of Problem	Needs Assessment	Programme Planning evaluation
Conceptualization of Programme	measures of current status, goal selection, pilot studies	
	FORMATIVE EVALUATION	
	Implementation evaluation	Progress Evaluation
Early cycles of programme - programme undergoing continual modification	measures of programme fidelity, student progress in individual units	
	SUMMATIVE EVALUATION	
	Documentation evaluation	Outcome evaluation
Programme in later cycles - stabilized	unobtrusive, non-interfering, no feedback to programme	

Source: Adapted from M.C. Alkin and C.T. Fitz-Gibbon, (1975) "Methods and Theories of Evaluating Programs". In: _Journal of Research and Development in Education_, Vol. 8, No. 3,: p. 3-15.

Before programme implementation takes place, two types of evaluation are conducted. They are needs assessment and programme planning evaluation. Both types are referred to as

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pre-formative evaluation, emphasizing that evaluation of this kind takes place before programme implementation. Needs assessment is variously referred to as values analysis (Pancer and Westhues, 1989) or front-end analysis (Patton, 1982). The purpose of needs assessment is to identify a social or educational problem. In doing so, the process of needs assessment provides valuable information to decision-makers that enables them to establish new social programmes (Borg and Gall, 1983; Alkin and Fitz-Gibbon, 1975). The purpose of programme planning evaluation is two-fold. The first purpose is to provide decision-makers and planners with relevant data about competing social or educational programmes that might be used for achieving the desired goals. The second purpose is to develop a planning document that depicts subsequent evaluation activities as well as a description of the entire instructional system to be followed (Alkin and Fitz-Gibbon, 1975).

Once a programme has been installed for implementation, it requires monitoring and modifying in order that it works as well as possible. An evaluation at this time is necessary in order to provide data about programme implementation and progress to those in direct contact with the programme. These may well be administrators, instructors or students who are participating in the programme. The purpose for conducting an evaluation at this point in time is to ensure programme improvement (Alkin and Fitz-Gibbon, 1975). This kind of evaluation has been called course

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improvement through evaluation (Cronbach, 1963), or formative evaluation (Scriven, 1967). The formative evaluation stage as shown in Table 10 above, consists of two distinct evaluation types, namely: implementation and progress evaluation. However, the two forms of evaluation are interrelated. Implementation evaluation seeks to know the level of compliance between implementation and the established programme goals (Rossi, et al., 1979; Perkins, 1977; Alkin and Fitz-Gibbon, 1975), while progress evaluation is interested to find out the extent to which participants are making progress toward the desired ends.

After conducting several formative evaluations, a programme should be well adjusted and able to run on its own. This is the time when summative evaluation is called for. Again, it will be noted from Table 10 that there are two types of summative evaluation, namely: documentation evaluation and outcome evaluation. Documentation evaluation seeks evidence about how the programme was actually delivered, whereas outcome evaluation is an attempt to assess the achievement of goals. Documentation evaluation data are essential in helping make accurate interpretations of outcome evaluation information (Alkin and Fitz-Gibbon, 1975).

According to Alkin and Fitz-Gibbon (1975), each of the evaluation stages (that is, pre-formative, formative and summative evaluation) consists of four phases:

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(1) ascertaining the decision areas of concern

(2) selecting appropriate information

(3) collecting and analyzing data in order to

(4) report summary information to decision-makers
     (Alkin and Fitz-Gibbon, 1975; p. 4).

The above theoretical scheme that has been advanced by Alkin and Fitz-Gibbon is evident of the influence and applications of the seven evaluation models discussed in the preceding paragraphs. Table 11 provides further evidence of the relationships between evaluation types and the evaluation models.

Table 11
The Relationships Between Evaluation Research
Types and Evaluation Models

EVALUATION TYPE	SOURCE OF INFLUENCE
Needs Assessment	Decision-oriented Advocacy-adversary Goal-oriented Expertise-oriented Utilization-oriented
Programme Planning evaluation	Decision-oriented Goal-oriented Advocacy-adversary Expertise-oriented Utilization-oriented

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TABLE 11 (continued)

Implementation evaluation	Decision-oriented Advocacy-adversary Naturalistic and participant- oriented Goal-oriented evaluation Expertise-oriented Utilization-oriented Evaluation research
Progress evaluation	Decision-oriented Goal-oriented evaluation Advocacy-adversary Naturalistic and participant Expertise-oriented Utilization-oriented Evaluation research
Documentation evaluation	Utilization-oriented Naturalistic and participant Decision-oriented Goal-free
Outcome evaluation	Decision-oriented Goal-oriented Advocacy-adversary Expertise-oriented Utilization-oriented Evaluation research

Some explanation should certainly follow in order to clarify the relationships in Table 11 above. Needs assessment is a process which enables programme managers, sponsors or planners to identify the needs and/or problems that a programme should address. Once this information has been collected, it is made available to decision-makers who, in turn, use it in decision

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making (decision-oriented evaluation model). These needs or problems become the organizing centres for programme goals (goal-oriented evaluation model). Sometimes where problems are highly technical or specialized, an evaluator may seek the views of experts in the field. This type of evaluation is informed by the expertise-oriented evaluation model (Herman, et al., 1987). When information is supplied for decision taking, decision-makers engage in serious discussions, wherein pros and cons of the identified issues are weighed. This activity is informed by the advocacy-adversary evaluation model. Similar arguments can be developed for the rest of the relationships in Table 11. Thus, there is a high relationship between evaluation types and evaluation models.

CRITERIA FOR EVALUATION

The purposes of programme evaluation have been emphasized under the discussions about different types of evaluation. In summary, programme evaluation is undertaken for programme installation, improvement, and accountability (Alkin and Fitz-Gibbon, 1975; Hamilton, 1980). Programme improvement is especially good because it strengthens the programme (Hamilton, 1980). It also goes far beyond strengthening the programme. What programme improvement does as well is that it actually improves the lives of the people participating in the programme. Thus, evaluation should be conducted because it has good

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intentions. But for evaluation to be useful, it is important that it meets certain quality standards. This interest led important organizations in the field of education to form what is now known as the Joint Committee on Standards for Educational Evaluation (Borg and Gall, 1983). Three reasons led to the foundation of the Committee, namely: to upgrade the technical quality of evaluations; to control biases or personal interests since evaluation is political; to improve the profession of evaluation through establishing guidelines to be followed by those engaged in the evaluation process. The emphasis is on the practical (Patton, 1982). Thus, in 1981, the Committee published a handbook entitled Standards for Evaluations of Educational Programs, Projects, and Materials. According to the contents of the handbook, a good evaluation study should satisfy four important criteria, namely: utility, feasibility, propriety and accuracy (Borg and Gall; 1983, Patton, 1982). To this list, Worthen and Sanders (1987) have added a fifth criterion: credibility. Utility as a quality of evaluation means the extent to which the findings will actually be used by the affected persons (Borg and Gall, 1983; Worthen and Sanders, 1987). Feasibility refers to the extent to which the evaluation is realistic in terms of time, cost and practicality. Propriety refers to the extent to which the evaluation protects the rights of the subjects involved in the evaluation. Accuracy refers to comprehensiveness of the evaluation in order to produce valid and

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reliable data (Borg and Gall, 1983; Worthen and Sanders, 1987).
Finally, an evaluation has credibility if it is believable to the
decision-makers who need it (Worthen and Sanders, 1987). These
five qualities must be met if an evaluation is to be considered
good. But it can be argued that satisfaction of evaluation
criteria such as utility, accuracy, and credibility depends on
the status and experience of the evaluator. It is important to
recognize that there are two sorts of evaluators: the evaluator
as a student and as a professional. The evaluator as a student
may command less respect among clients or decision-makers because
the single word student carries different meanings to different
people. Many times the term student has been associated with
inexperience. Further, the term inexperience has many times been
taken to mean inaccuracy. It is such interpretations which may
jeopardize both the utility and credibility of the evaluation
data generated by the student evaluator.

THE COLLECTION OF DATA

There are many ways of collecting data for evaluation.
Table 12 shows the different approaches that can be used to meet
this objective.

Table 12:
Information Collection Procedures

PROCEDURE		PROCEDURE	
1.	Case studies	12.	Interaction analysis
2.	Interviews	13.	Inventory checklist
3.	Panels, hearings	14.	Judgmental ratings
4.	Records analysis	15.	Knowledge tests
5.	Logs	16.	Opinion survey
6.	Simulations	17.	Performance tests
7.	Systems analysis		and analysis
8.	Advisory, advocate teams	18.	Delphi technique
9.	Judicial review	19.	Self-ratings
10.	Observation checklist	20.	Survey questionnaire
11.	Sociograms	21.	Time series analysis
		22.	Q-sort

Source: Adapted from D.L. Stufflebeam, et al., (1985):
Conducting Education Needs Assessment.
Boston: Kluwer Nijhoff Publishers, p. 88-89.

What should be underscored is that the choice of method of
collecting information for evaluation is determined by the type
of evaluation, the purpose or the question that the evaluation
seeks to answer and the sources of data for evaluations
(Hamilton, 1980; Posavac and Carey, 1980; Anderson and Ball,
1978; Reichardt and Cook, 1980). The analysis presented in Table
13 below assists in making method choices.

Table 13:
Evaluation Type, Purposes, Sources of Data
and Methods of Programme Evaluation

EVALUATION TYPE	PURPOSES	SOURCES OF DATA	METHODS
1. Needs Assessment	Problem definition	Students, teachers, programme records, experts and wider community	Surveys, inventory checklist, expert judgment case study, adversarial methods, panel hearings, social indicators.
2. Programme Planning Evaluation	Planning Programme conception	Students, teachers, experts, decision-makers	Surveys, expert judgment, adversarial methods, pre-post tests
3. Implement-ation and Progress evaluations	Program improvement	Students, teachers, adminis-trators, experts, classroom materials	Program review surveys, expert judgment, case study experimental study investigation journalism, tests, attitude measures content analysis, unobtrusive measures

TABLE 13 (continued)

4.	Document-ation and Outcome evaluations	Account-ability or Evidence	Students, teachers, adminis-trators, wider community, classroom materials	Experimental, quasi-experimental study, surveys, case study, adversarial methods, illuminative evaluation, onobtrusive measures, content analysis

The various methods suggested in Table 13 above are certainly not meant to be exhaustive! The list is meant to show the more common methodologies for evaluation. The rest of this research review, therefore, describes the different methods of conducting evaluation for summative decision-making. These methods are relevant to the present study since this study is a follow-up summative evaluation study.

Experimental and Quasi-Experimental Methods

Experiments can be applied in the evaluation of educational programmes. However, there are two major forms of experiments, namely, true and quasi-experiments.

A true experiment consists of the use of a control group and an experimental group. Participants in both groups are randomly selected. The purpose of randomization is to assure that both groups of participants are equivalent and therefore making it

possible to explain any casual relationships (Borg and Gall, 1983). In such an experiment, the experimental group receives the programme while the control group does not receive any treatment. Any observed differences between the experimental and control groups after a particular programme has been delivered is att: buted to the programme.

True experimental designs may take the form of a pretest-posttest design, posttest-only design or the Solomon four-group design (Gay, 1987; Wolpert, 1981; Borg and Gall, 1983). In the pre-posttest design, a pretest is first administered to the two randomly selected groups - that is, the experimental group and the control group. Thereafter, the programme is given to the experimental group and not to the control group. At the end of the programme operation, a posttest is administered to both groups. Any observed differences in test performance is explained in terms of the programme.

The posttest-only design is exactly the same as the pre-posttest design except that a pretest is not given to both groups. Again, participants are randomly selected to both the experimental and control groups. Any differences observed after the programme has been presented to the experimental group are attributed to the programme.

The Solomon four-group design consists of four groups to which participants are randomly assigned (Gay, 1987; Borg and

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Gall, 1983). Two of the four groups are pretested, while the other two are not. The programme is delivered to one of the pretested groups and to one of the unpretested groups. After programme delivery, all the four groups are posttested and the results analyzed.

The shortcomings of experimental designs such as the above are clear. First experimental studies are not feasible in evaluation. Smith (1980) gives the following reasons: (a) administratively, it is not feasible to randomly sample individuals belonging to a group such as a classroom setting; (b) there may be variability in programme implementation thereby making experimental inferences suspect; (c) experiments take too long to operate and therefore, may not facilitate quick decision making regarding a particular programme; (d) some individuals may not wish to participate in their randomly selected groups. Secondly, experimental studies are not desirable in evaluation (Smith, 1980). It is unethical to offer a programme to one group of people and not to the other, especially where participants have been randomly selected to an experimental and a control group. True experimental designs such as the above inform one only about the effects of a programme. They do not provide policy-makers with data on how to improve programme processes, conditions or inputs (Smith, 1980). Moreover, experimental conditions do not match well with natural

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conditions with the result that findings from such studies have little validity in natural settings. Findings from experimental studies misguide people because it is claimed that they are generalizable. Because a programme has produced desirable effects in a particular situation, the tendency among people is to apply such findings in their own situation. With these limitations, it may be useful to consider quasi-experimental methods.

Quasi-experimental methods are used when it is not possible to apply true experimental designs (Gay, 1987). Quasi-experimental designs or methods are easier to conduct (Smith, 1980) and they are more practical (Weiss, 1972) than true experimental designs. Only two commonly used methods will be discussed under quasi-experimental designs. The first of the two is the non-equivalent control group design which is in many ways similar to the pre-posttest experimental design. The only major distinction is that study participants are not randomly selected to both the experimental and control groups (Gay, 1987). A pretest is given to two already existing groups, a programme is then given to the experimental group and it is then followed by a posttest which is administered to both the experimental and control groups. This method minimizes possible effects from reactive arrangements since it involves naturally existing groups of people. This means study participants may not even be aware

of their participation in an experimental study (Gay, 1987).

There is also the other type of quasi-experimental study design. It is referred to as the time-series design (Weiss, 1972; Gay, 1987; Borg and Gall, 1983; Nachmias, 1979). In such a design, the investigator works with a particular study group. The group is repeatedly pretested (may be three or four times) and then the group is given the programme. This is then followed by repeated posttesting. Repeated pretesting and posttesting enables the investigator to gain confidence about the effectiveness of the programme. One of the weaknesses of this type of design is that it has no control group for comparison and therefore, the findings that would be generated from such a study would represent only partial evidence (Nachmias, 1979).

When compared with experimental designs, quasi-experimental designs are more feasible (Smith, 1980; Weiss, 1972) and they are more commonly used in educational evaluations (Worthen and Sanders, 1987). The next section looks at other possibilities of impact assessment of an educational programme.

Surveys

Surveys have a long history (Borg and Gall, 1983), and, their use in evaluation research continues to be recognized to the present day (Blacher, 1985; Casley and Kumar, 1988; Fink and Kosecoff, 1985; Anderson and Ball, 1978). The continued

application of survey methods in evaluation research is due to the fact that surveys allow researchers to tap certain types of information from respondents which cannot be obtained by such methods as experiments (Nachmias and Nachmias, 1987).

There are two major types of surveys; the questionnaire survey and the interview survey. The following sections discuss and evaluate both forms of survey.

The Questionnaire Survey

The Encyclopedia of Educational Evaluation describes a questionnaire as:

> ... a group of printed questions used to elicit information from respondents by means of self-report. The questions may be open-ended, requiring respondents to answer in their own words, or fixed choice, requiring respondents to select one or more answers from among those provided... The respondents may also be provided with checklists or rating scales. Questions may be concerned with respondent's personal background, factual knowledge, or attitudes and opinions (Anderson, et al., 1973; p. 311).

Altschuld and Lower (1984) both indicate that questionnaires are extensively applied in evaluation studies. The reasons for their wide application in evaluation studies are many. First, they can easily be sent out by mail. This suggests that questionnaires are cheaper to administer than interviews which require trained interviewers (Anderson, et al., 1973; Nachmias and Nachmias, 1987; Fink and Kosecoff, 1985). According to Nachmias and

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Nachmias (1987; p, 228), all that questionnaires need "... is the cost of planning, sampling, duplicating, mailing, and providing stamped, self-addressed envelopes for the returns". Secondly, mail questionnaires reduce biasing errors which could be created under the conditions of an interview. When an interviewer questions a respondent during an interview, his/her personal characteristics are more likely to affect the respondent. The respondent may either be truthful or dishonest in his/her responses. This can affect the quality of information received. This is what is meant by the fact that mail questionnaires reduce biasing errors. Thirdly, mail questionnaires ensure anonymity (Anderson, et al., 1973; Nachmias and Nachmias, 1987) because they are completed in the absence of an interviewer. Such assurance of anonymity allows the investigator to ask questions about sensitive issues such as a person's income. Assurance of anonymity further implies that responses are as frank as possible. Fourthly, mail questionnaires allow respondents freedom to complete them at their own pace (Anderson, et al., 1973). This element suggests that responses are well considered since there is adequate time for item completion. It also implies that respondents can consult with personal documents or with other people should need be (Nachmias and Nachmias, 1987). Fifthly, questionnaires enable coverage of a large number of research subjects spread over a wide geographic area at minimal cost.

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The above important characteristics or advantages of questionnaires have contributed to their widespread use in evaluation studies. However, mail questionnaires have all the disadvantages of self-reporting measures. The responses may not be accurate and it is difficult for the investigator to determine their validity. There is no control over who completes the questionnaire. Any other individual apart from the intended respondent may well fill it out (Nachmias and Nachmias, 1987; Anderson, et al., 1973; Udinsky, et al., 1981). The fact that a questionnaire can be mailed out and self-administered is itself a built-in weakness (Ferman and Levin, 1975). The questionnaire demands a level of education which many research subjects may not have achieved. The mail questionnaire provides no opportunity for probing beyond the responses that are given. Finally, the most serious limitation of mail questionnaires is their usually low response rate. This results into a biased sample which, in turn, affects the validity of the study results (Udinsky, et al., 1981; Anderson, et al., 1973; Nachmias and Nachmias, 1987). However, this serious problem of low response rate can be overcome by using specific techniques. These strategies include: ensuring professionalism by making the questionnaire format look attractive, by including a cover letter that clearly states the purpose of the study and that also assures respondents of confidentiality, by enclosing a stamped self-addressed return

envelope; applying follow-ups through the periodic use of reminders; and ensuring that questionnaire content is significant to respondents (Altschuld and Lower, 1984; Institute for Social and Economic Research, 1984; Nachmias and Nachmias, 1987).

The Interview Survey

An interview has been described as "... a face-to-face confrontation between an interviewer and a S or a group of Ss. It is an oral exchange between individuals" (Wiersma, 1969; p. 274). Like the questionnaire, the interview is commonly used in evaluation studies also (Anderson, et al., 1973). Casley and Kumar (1988) distinguish between individual and group interviews and further identify three types of qualitative individual interviews: "informal, conversational; topic-focused; and semi-structured, open-ended".

The informal, conversational interview is characterized by flexibility and informality. Both of these features enable the investigator freedom to explore a broad area with the respondent who is encouraged to contribute his/her views, experiences and values on the issue. While this is going on, the interviewer makes only a few notes so as to preserve the informal atmosphere. This approach has several limitations. First, it is time-consuming. The interviewer may not be able to interview as many subjects as possible. Secondly, the information collected from one respondent may not easily be comparable with data obtained

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from another subject. And it is even more difficult to compare the information if it has been collected by two or more interviewers. Thirdly, the technique is prone to biasing errors (Casley and Kumar, 1988) influenced by the personal characteristics of the interviewer. However, the following strengths may be claimed. This approach to interviewing may generate a wide range of issues and it may also be possible, if handled skillfully, to reveal information that is considered confidential.

Then there is a second classification of qualitative interviews. This is the topic-focused interview. In implementing this interview method, the investigator uses an interview guide which lists topics to be covered during the interview. The topics help the interviewer to exercise direction. All that the investigator needs to do is to phrase questions centred around the pre-set topics. This approach has two strengths. The use of the interview guide makes it possible to compare data from different subjects since all data have a common source - the topics contained in the guide. Time is saved since discussions are guided by the topics.

Thirdly, there is the semi-structured, open-ended type of interviews. According to Casley and Kumar (1988), this type represents the most structured form of qualitative interviews. This form of interview has three important characteristics. It

has open-ended questions - thus encouraging respondents to express themselves fully. Question sequence is not predetermined. It creates opportunity for asking additional questions. The advantages of the method are that comparability of information is possible; information that is obtained is relevant to the specific questions asked.

The above three types of interviews apply to individual interviews. But others point out that interviews can also be close-ended wherein an interview schedule is used and there are also possibilities of conducting personal interviews over the telephone. The disadvantage of the latter approach is that they result in the broken-off conversations (Nachmias and Nachmias, 1987). Sometimes the respondents terminate interviews before completion.

Group interviews are an alternative to individual interviews in which the research participants discuss issues among themselves while the investigator records or takes notes of the information. The justification of using group interviews is that the process is rapid and economic and it is often possible to get access to private information from a group (Nachmias and Nachmias, 1987).

A problem most associated with interviews is interviewer bias. This specific problem can be overcome by providing training for interviewers. The next section deals with the case study method.

The Case Study Method

The case study method is sometimes referred to as participant observation (Nachmias and Nachmias, 1987; Stenhouse, 1985). According to Stenhouse (1985; p. 645) "case study methods involve the collection and recording of data about a case or cases, and the preparation of a report or a presentation of the case". Thus, the case study method can well be adapted for use in evaluation studies.

Case studies can take several forms but the two major types are complete participant and participant-as-observer. When the investigator takes the role of the former, his/her study intentions are not known to the research subjects. He or she very much plays the role of a spy. The investigator has the advantage of observing events happening as naturally as possible. Thus, the strength of the approach owes much to the fact that it allows the study of information that cannot be obtained easily by other methods of study (Nachmias and Nachmias, 1987). The method has serious limitations both ethically and methodologically. Nachmias and Nachmias (1987) both consider the activities of the researcher who takes the role of complete participant as unethical since it suggests invasion of human privacy. Methodologically, the researcher cannot ask questions since this can generate suspicions among the subjects. The researcher is further handicapped by the fact that he/she cannot take notes of

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the observations on the spot. This activity has to be postponed until such a time when the investigator is alone. In so doing, the investigator has to rely on memory which contaminates the information as a result of selective bias and inaccuracy due to distortions (Nachmias and Nachmias, 1987).

By contrast, when the investigator plays the role of participant-as-observer, he/she makes the study objectives known to the observed. Membership and participation in the group remain important dimensions. This approach enables the investigator to understand the group and its way of life better. The use of questioning in the process of observing group dynamics is illuminative. The next section gives consideration to yet another novel evaluation technique - the adversarial method.

The Adversarial Method

The adversarial method has developed from the legal profession. As Braithwaite, et al. (1982) note, this procedure for formative and summative evaluations is widely supported by educators, including research professionals. The guiding philosophy of the adversarial method is generating the truth for evaluation purposes (Anderson, et al., 1973). The method emphasizes the use of an open clarification procedure aimed at illuminating issues to inform decision. Moreover, this approach

allows expression of human subjective feelings (Braithwaite, _et al_., 1982).

The adversarial method has different variations aimed at fact finding and cross-examining. There is the legal profession approach wherein pros and cons are presented by two teams of programme evaluators. In this approach, the programme administrators act the role of a panel of judges.

Another variation has been proposed by Levine (1973). According to him, programme evaluations based on this model should create an opportunity for the inclusion of an adversary who would cross-examine all the collected evidence.

Kourilsky (1973), Popham and Carlson (1981) suggest a setting in which both teams of programme evaluators would each examine both the pros and cons of the programme being evaluated. In this way, both biases and hidden assumptions should emerge (Kourilsky, 1973).

While the adversarial method is now widely used in educational evaluations (Popham and Carlson, 1981), it has some short-comings. Some evaluators may not have the appropriate skills to enable them to participate fully in such a setting. It is also difficult for an evaluator to present positive facts about a programme that has produced negative effects. There is also a cost factor involved in hiring two panels of evaluators who must plan, evaluate, prepare for the presentation, and then

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finally present, according to the requirements of the adversary method.

Illuminative Evaluation

Although evidence shows that illuminative evaluation methodology has been much applied in formative evaluation (Miles, 1981), the technique can be used in summative decision-making as well. This methodology was developed in the early seventies by Parlett and Hamilton (Miles, 1981). Illuminative evaluation works toward two major objectives: describing and understanding. These two elements make illuminative evaluation firmly grounded in sociological and anthropological methods of social inquiry (Miles, 1981).

When illuminative evaluation is undertaken, the evaluator gathers information through meetings, interviews with various levels of people connected with the programme, survey questionnaires, and examination of programme documents. The object is to look at both the intended and the unintended programme effects. But a weakness of the method is that it is time-consuming (Miles, 1981) and therefore costly; otherwise it is a useful methodology since it examines the total context in which an educational programme was operated.

Secondary Methods

The evaluator can also use secondary data collection methods to support the data generated by the primary methods discussed above. The three commonly used secondary data collection methods include: the use of social indicators as a measure, unobtrusive measures, and content analysis. These methods are briefly discussed as follows:

Social Indicators

The use of social indicators in programme impact assessment is currently receiving increased attention among evaluation researchers (Bertrand, et al., 1981). The concept of a social indicator has been borrowed from economics where social conditions are studied using social indicators as measures of judgment. Thus, when evidence of programme effectiveness is needed by sponsors or administrators, the evaluator may look at social indicators, for example data on student progress with respect to a particular educational programme.

One of the major limitations of the approach is that any one social indicator is affected by many other social forces (Anderson, et al., 1973). This difficulty makes it almost impossible to explain causal relationships with confidence.

Unobtrusive Measures

When programme effectiveness is assessed through the use of questionnaires or interviews, it is difficult to ascertain the truthfulness of data obtained by these means, because respondents are capable of changing their behaviour, particularly when they know information is being collected from them. This has necessitated evaluators to use indirect measures. These measures are termed unobtrusive to emphasize that they are not direct measures. The evaluator, using this technique, looks for physical clues of programme activities, for example, the number of library books signed out by course participants during course delivery. Other important unobtrusive indicators include records of attendance, number of assignments completed by participants, course grades and number of drop-outs from the programme. However, Worthen and Sanders (1987) report that a weakness associated with this method is that it tends to be unreliable. To get around this problem, it is advisable to cross-check the observed data.

Content Analysis

Content analysis is both an observation technique as well as a technique of data analysis (Nachmias and Nachmias, 1987). Content analysis has been described by Holsti (in Nachmias and Nachmias, 1987; p. 333) as "... any technique for making

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inferences by systematically and objectively identifying specified characteristics of messages". Its use in evaluation research is gaining momentum (Ferman and Levin, 1975) because, as a general technique, it can be adapted for many uses in evaluation research (Anderson, et al., 1973). The technique can be used to analyse programme records, responses to open-ended questions in a questionnaire, speeches made by key persons during programme implementation and conversations among programme participants.

When using the technique, the evaluation researcher first specifies the characteristics of the content to be measured. These characteristics are referred to as recording units (Ferman and Levin, 1975; Nachmias and Nachmias, 1987). The recording units are in five forms: "words/or terms, themes, characters, paragraphs, and items" (Nachmias and Nachmias, 1987: p. 337). Many studies use theme as the recording unit because themes can be found in many contexts such as illustrations, paragraphs, sentences and clauses. However, it is important to emphasize that the recording categories or units must reflect the study purpose.

As soon as the appropriate recording units have been identified, the evaluator carefully looks at each document and notes the frequencies of occurrence of particular themes, words or items. The frequencies of occurrence of particular recording units constitute the data to be reported. Thus, the technique of

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content analysis is a helpful one in evaluation research.

CONCLUSION

The section has examined the differences and similarities between evaluation research and conventional research which is really another way of looking at the two major evaluation camps: qualitative and quantitative evaluation paradigms. It has highlighted the common evaluation models available in the evaluation literature. A purpose of the inclusion of evaluation models is to show how different educators define evaluation. Another more important purpose, especially relevant to this research, is to illustrate how evaluation models influence evaluation research types which, in turn, influence evaluation methodologies. These connections have been shown in the appropriate tables. The rest of the chapter has dwelled heavily on evaluation methodologies with emphasis on summative evaluation techniques. It must be stressed that all summative evaluation techniques are equally applicable to formative evaluation as well because the difference between these two types of evaluation is fine and arbitrary.

Different types of evaluation methods have been reviewed. The variation in evaluation methodologies indicates that evaluation is very much a dynamic field of inquiry. This dynamism is consistent with the practical purposes of evaluation.

Educators are interested to improve educational conditions through the application of good, practical decisions.

These many variations in evaluation methods also imply that the evaluator has the freedom to make method choices for evaluation. However, the investigator's purpose is the chief guide, as emphasized in the following quote: "The important thing is to suit the method to the motive..." (Anderson and Ball, 1978; p. 65). Thus, any method is important, provided it relates to one's purpose. It is also important to consider the cost factor when planning an evaluation study. This cost factor and other considerations have persuaded the researcher to undertake a questionnaire survey in evaluating an in-service programme in Malawi.

CHAPTER IV

RESEARCH METHODOLOGY

THE PURPOSE OF THE STUDY REVISITED

Selected educational leaders in the Malawi primary educational system received in-service training one to two years ago. The present investigation was an attempt to assess the level of participants' satisfaction with their in-service training programme. A further purpose was to determine whether any selected biographical or demographic characteristics of the in-service graduates were significant factors in their perceptions of the programme.

THE SUBJECTS

The subjects of the study were all the School Heads and Inspectors who graduated from the MIE-BU Teacher In-service Project in 1986 and 1987. There were 150 participants: 90 enrolled in 1984 and a further 60 enrolled in 1985. The total number of course graduates was 145 because some of the participants dropped-out while the programme was in operation (Malawi Institute of Education, 1985). Some of the participants retired from the teaching service and others joined the Adult Diploma in Education Programme at Chancellor College of the University of Malawi. Thus, this study involved all the 145 participants who graduated from the programme in 1986 and 1987.

Patton (1980) points out that there are two arguments which justify the inclusion of the entire population when conducting research. The first argument is psychological or political. If some of the subjects are left out as a result of random sampling, it is possible that they may feel discriminated against and thus offended. In this study, the people who would have been left out would probably have thought that they were not performing as well as those who would have been chosen for participation in the research. This would have been a cause of feelings of discrimination. The second reason for involving everybody is methodological. If a sample is too small, there is a great danger of disregarding true programme effects as statistically insignificant.

The 145 subjects consisted of 74 School Inspectors and 71 School Heads. There were 115 males and 30 females (Malawi Institute of Education, 1985). They came from all the 24 Administrative Districts of Malawi.

In addition, the study also involved a sample of 15 primary school teachers working under the School Heads who participated in the re-training programme. The reason for including these teachers in this research was to obtain another perspective regarding the performance of the in-service graduates in the school system. As already pointed out in Chapter 1, the above sample was considered too small to allow any useful interpretations of the results. Thus, this was one of the limitations of the study.

Since they were not the main focus of the inquiry, the sample of the teachers was drawn from only 4 districts, all of which were within easy reach of the the Malawi Institute of Education. The 4 districts were Blant yre, Chiradzulu, Machinga, and Zomba.

THE DESIGN

The literature review has shown that there are many different methods that an evaluator can use in seeking information for programme evaluation. These methods have both their strengths and limitations. What is important is that the researcher relates the preferred method to the purpose of the study. This view is supported by Anderson and Ball (1978; p. 65) who state: "The important thing is to suit the method to the motive..."

This study used the mail questionnaire survey in seeking answers to the questions that the researcher addressed. The questionnaire survey method has some limitations. For example, it does not provide the opportunity for probing beyond the responses that are given and it is also prone to low response rates (Nachmias and Nachmias, 1987; Babbie, 1986; Udinsky, et al., 1981; Anderson, et al., 1973). However, its use in evaluation studies is extensive (Altschuld and Lower, 1984). The reasons for its widespread application in evaluation studies are many.

First, the reader should be reminded that the present investigation was a follow-up study of School Heads and Inspectors who attended an in-service programme one to two years ago in Malawi. After participating in the training programme at the Malawi Institute of Education, the Heads and Inspectors returned to their workplaces. This emphasizes that the participants were widely distributed geographically, since they were drawn from all the 24 Administrative Districts of the country. The mail questionnaire survey was therefore, in this case, the cheapest and quickest means of collecting data from these subjects who were widely spread (Babbie, 1986; Fink and Kosecoff, 1985; Anderson et al., 1973).

Second, the mail questionnaire ensures that all the respondents answer the same questions, thus allowing the investigator to compare findings from different subjects more easily.

Third, the mail questionnaire reduces biasing errors which could result under the conditions of an interview (Nachmias and Nachmias, 1987). In mail questionnaire surveys, the researcher's personal characteristics do not interfere with those of the respondents.

Fourth, because information is gathered by mail, this quality ensures both anonymity and confidentiality (Nachmias and Nachmias, 1987; Babbie, 1986; Anderson, et al., 1973). Both qualities imply that responses can be made as frank as possible.

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The final strength of the mail questionnaire survey is that it allows respondents adequate time to complete the questionnaire items. This is an important advantage. It creates opportunities for respondents to carefully consider the questionnaire items either by consulting other people or appropriate documents, depending upon the nature of the inquiry. These important properties of the mail questionnaire have greatly contributed to its widespread use in evaluation studies.

The foregoing essential characteristics of the mail questionnaire influenced the investigator's decision to adopt this particular methodology for use in this research because it suited the motive of the inquiry.

This study also involved the use of interviews aimed at assessing the opinions of 15 selected primary school teachers working under the School Heads who completed the training. As previously stated, this was done to obtain another view regarding whether the graduates had changed in their job performance. This assessment was undertaken through structured interviews. Structured interview schedules are faster to work with and also, they are focused and to the point, unlike unstructured interviews (Borg and Gall, 1983; Nachmias and Nachmias, 1987). The technique is inexpensive when used with a small sample such as the one described above. Since the investigation sought in-depth data, the structured interview is the most convenient method to obtain the required information (Jackson, 1988; Brink and Wood, 1983).

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QUESTIONNAIRE BACKGROUND

The goal of the inquiry was to measure the degree of satisfaction of in-service trainees in Malawi. However, Guba (1958-59) points out that satisfaction is an arbitrary concept. This implies that both the definition and measurement of satisfaction depend upon the purposes of the investigator. Therefore, the present study examined the issue of participants' satisfaction with the in-service training from the perspectives of the measures of job-satisfaction/dissatisfaction based on Herzberg's Two-Factor Theory (Herzberg, Mausner and Snyderman, 1959). Measures of job-satisfaction/dissatisfaction apply to the study of reaction to a training programme because training and the workplace are inseparable. Further, training is a support structure for organizational development (Joyce and Showere, 1988; 1980; Smylie, 1988). As a result of training, people develop attitudes, knowledge and skills which they transfer to the workplace. Therefore, this assumption makes it possible to apply indices of job-satisfaction to studies of reaction to training. The measures of job-satisfaction/dissatisfaction are based on Herzberg's Two-Factor Theory (Herzberg, Mausner and Snyderman, 1959).

The Two-Factor Theory, also known as the "Motivation-Hygiene Theory" (Pastor and Erlandson, 1982; Sergiovanni and Carver, 1980), maintains that there are two sets of factors which contribute to job satisfaction/dissatisfaction. The first of

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these sets of factors are termed satisfiers (Sergiovanni and Carver, 1980; Herzberg, Mausner and Snyderman, 1959) or job content factors (Hill, 1986-87). These factors are intrinsic motivators related to the actual content of the job itself. According to Herzberg and his colleagues, these factors contribute to job satisfaction, if present, but not to dissatisfaction when absent. The other factors are referred to as dissatisfiers or job context factors (Hill, 1986-87; Herzberg, Mausner and Snyderman, 1959). These elements are described as extrinsic factors or hygienes (Hill, 1986-87). The extrinsic factors are directly related to the working conditions. The absence of these factors in the work environment leads to dissatisfaction (Hill, 1986-87; Sergiovanni and Carver, 1980; Herzberg, Mausner and Snyderman, (1959). Table 14 below lists the factors that are considered satisfiers and dissatisfiers.

TABLE 14
Herzberg's Satisfiers and Dissatisfiers

SATISFIERS	DISSATISFIERS	
Achievement	Salary	Policy and
Recognition	Possibility of growth	Administration
Work itself	Interpersonal relations	Working conditions
Responsibility	Status	Job security
Advancement	Supervision	Personal life

Source: Adapted from Herzberg, F., Mausner, B., and Synderman, B. (1959): The Motivation to Work. N.Y.: John Wiley, p. 81.

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Herzberg and his colleagues emphasize that satisfiers produce high attitudes and high performance while dissatisfiers produce low attitudes and low performance.

Herzberg's theory has been tested by other researchers working in business administration and industry. For example, Myers (1964) applied the theory at Texas Instruments Corporation in the United States of America where he used scientists, supervisors, engineers and other types of workers as his research subjects. Myers' research concluded that achievement, recognition, and advancement were the most frequently reported motivators (job satisfiers), whereas thin pay, poor policy and administration, and a lack of supervision were the greatest dissatisfiers.

Educational researchers also have applied the theory to the study of educational organizations. Sergiovanni (1967) used the Herzberg technique in the study of teachers in schools. His research reported that achievement of knowledge, recognition of teachers' work by administrators and responsibility were the principle motivators for teachers. These factors produce high attitude and high performance for teachers. Sergiovanni's study also revealed that poor interpersonal relationships (that is, among teaching staff, between teaching staff and students, and between teaching staff and the local school community), poor administration (such as a lack of recognition of teachers), poor supervision of teachers by supervisors, and teachers' personal matters (such as thin salary or pay) caused dissatisfaction for

teachers. According to Sergiovanni (1967) these factors have the potential to lower a teacher's job performance.

Schmidt (1976) applied the technique to secondary school principals in the Chicago area in the United States of America. Schmidt's study has reported similar results. School principals rated achievement, advancement and recognition as the chief determinants of their overall satisfaction. On the other hand, they identified salary, interpersonal relations, policy and administration and supervision as the sources of job dissatisfaction.

Hill (1986-87) assessed the issue of job satisfaction/dissatisfaction of college faculty using Herzberg's approach. His findings pointed out that college faculty obtained satisfaction from teaching and from working in their fields of specialization. Hill's study also reported that such matters as recognition, salary or fringe benefits, administrative features and collegial associations were sources of dissatisfaction among college faculty.

The results reported by the above studies suggest that the various factors which cause teacher-job satisfaction and dissatisfaction represent teachers' valued needs in their workplace. (Ndu and Ohikhena, 1983). These needs closely correspond with Maslow's higher-order and lower-order needs associated with human motivation. According to Abraham Maslow, people are motivated to work because of the desire to satisfy

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human needs.These needs exist in a hierarchy as shown below.

Figure 4
Maslow's Hierarchy of Needs
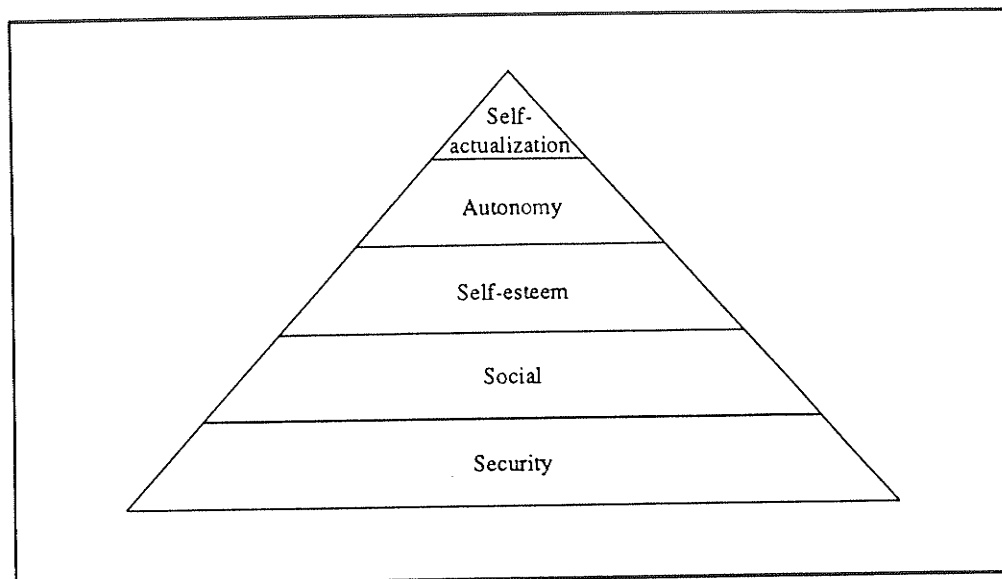
Source: Adapted from Sergiovanni, T.J. and Carver, F.D. (1980):
The New School Executive - A Theory of Administration
(2nd Ed.).   San Francisco: Harper and Row, p. 93.

Maslow's need hierarchy as shown above emphasizes the fact that the various levels of human needs are interdependent. To move from one need level to the next requires the satisfaction of the preceding needs. For example, moving from the security needs level to the social needs requires satisfaction of the security needs such as money and employment benefits (Sergiovanni and Carver, 1980). Also, moving from the social needs level to self-esteem, demands the satisfaction of social needs such as the need for belonging, friendship and organizational membership. The needs for autonomy such as the need for participating in decision-making and the need for authority cannot be achieved

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unless the needs for self-esteem such as self-respect, confidence and recognition have been achieved. Lastly, the need for self-actualization which is represented by the achievement of knowledge, and personal professional success cannot be satisfied unless autonomy needs have been met (Sergiovanni and Carver, 1980).

Maslow's needs can be separated into two categories: the lower-order and the higher-order needs. The lower-order needs include security, social and self-esteem needs, whereas the higher-order needs refer to autonomy and self-actualization needs. Maslow's lower-order needs correspond with Herzberg's factors of job dissatisfaction such as salary or pay and interpersonal relationships, whereas the higher-order needs are closely related to Herzberg's factors of job satisfaction such as the recognition of a teacher's work by his or her supervisor, a teacher's opportunity for responsibility and a teacher's achievement of knowledge and skills.

It is reasonable to consider Maslow's theory as a further development of Herzberg's work. While the latter focuses on the importance of recognizing the job-contextual factors for organi zational improvement, the former emphasizes the human - or the individual - contextual factors for organizational development. In practice, these two sets of factors interact to enable organizations to achieve their purposes (Argyris, 1957)). It is also reasonable to expect the goals of training to reflect both the needs of organizations and those of the participants in

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them. The needs of the organization consititute the individual –

contextual goals for training (Griffin, 1978). This is why

successful training and development programmes always consider

both the organizational and individual needs when undertaking a

need assessment before programme installation. Thus, both

Herzberg and Maslow are appropriate to research into a training

programme.

This investigation was an assessment of participants'

satisfaction with the MIE-BU Programme in Malawi using the

Herzberg technique. It was an attempt to ascertain from the

participants whether the in-service training programme had

assisted in meeting both their individual valued needs and those

of the organization to which they belonged. Through the

questionnaire survey technique the study addressed these sorts

of questions.

1. (a) To what degree are the graduates satisfied with the in-
service training programme that they received at the
Malawi Institute of Education at Domasi?

   (b) What is the participants' ranking of satisfaction along
the following dimensions: Achievement of academic
knowledge and technical skills, Job-performance,
Administrative, Collegial, Recognition-support,
Personal, and Economic dimensions?

   (c) For each dimension, which areas reveal a relatively
high and low degree of satisfaction?

2. Are there any differences in levels of satisfaction
between:

   (a) The first graduates who completed the in-service
programme in 1986 and the second graduates who came out
of the programme in 1987?

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(b)   Heads and Inspectors?

(c)   Heads of urban, model, and rural schools?

(d)   Heads of large schools and Heads of small schools?

(e)   Male and female graduates?

(f)   Older and younger graduates?

3.   To what extent are the graduates involved in operating in-service training programmes for the teachers in the school system?

QUESTIONNAIRE DEVELOPMENT

The survey questionnaire for use in the study was in two parts. Part One was primarily concerned with the assessment of participants' satisfaction with the in-service programme. It should be pointed out that this part of the instrument was developed using both Herzberg's Two-Factor Theory and Maslow's Need Theory. Thus, the participants' satisfaction with the training they received was assessed according to the following 7 dimensions:

(a)   Achievement of academic knowledge and technical skills
(b)   Job-performance
(c)   Administrative
(d)   Collegial
(e)   Recognition-support
(f)   Personal
(g)   Economic

According to Griffin (1978), training and development has 3 important interactive elements, namely, conventional goals, individual-contextual goals, and structural properties for manipulation. Thus, the above variables of satisfaction fall

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within Griffin's categories. Both the achievement and the job-performance dimensions represent the conventional goals for training and development. Training and development is aimed at advancing the knowledge, skills, and understanding of teachers in ways that contribute to changes in their thinking and classroom practice (Smylie, 1988; Miller and Wolf, 1978); hence, the inclusion of the achievement and job-performance dimensions. The administrative, the collegial, and the personal dimensions are, in the view of Griffin, the individual-contextual goals for training and development. Training and development, under proper conditions, should contribute to more teacher participation in school decision-making (the administrative dimension), greater collegiality and widespread peer-group interaction (the collegial dimension), and the creation of opportunities for the educator's self-actualization (the personal dimension). Finally, the recognition-support and the economic dimensions are, according to Griffin, the structural properties of training and development which should be manipulated in order to accomplish the above two sets of goals, namely, the conventional and the individual-contextual goals. This implies that programme admanistrators and developers should provide, among other things, rewards for those who participate in training programmes (Griffin, 1978); hence, the reason for including the recognition-support and the economic dimensions. Thus, Herzberg, Maslow and the foregoing provided the rationale for using the above specified dimensions in

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assessing the trainees' perceptions of satisfaction with the MIE/BU Teacher Programme.

Each of the 7 dimensions of satisfaction was measured according to the variables shown in the table below. However, the reader should note that the following list of variables was an adaptation from the relevant research that was reviewed, and it was also a reflection of the programme content in Malawi.

TABLE 15
Satisfaction Dimension Variables

I   ACHIEVEMENT OF ACADEMIC KNOWLEDGE AND TECHNICAL SKILLS
     1.   Academic content (teaching areas)
     2.   Understanding the learning process
     3.   Planning
     4.   Staff Development
     5.   Evaluation
     6.   Communication
     7.   Interpersonal relationships
     8.   Supervision

II   THE JOB PERFORMANCE DIMENSION
     1.   Increased creativity
     2.   Improved relationships with staff
     3.   Improved relationships with supervisors
     4.   Increased confidence
     5.   Improved ability in initiating and managing change
     6.   Increased ability in improving teaching and learning
          performance
     7.   Improved interpersonal and communication skills
     8.   Improved skills in conducting staff development
     9.   Improved abilities in solving institutional problems
     10. Improved skills in evaluating teaching and learning
     11. Improved skills in negotiating with staff in decision-
          making
     12. Improved school-community relations

TABLE 15   (continued)

III   THE ADMINISTRATIVE DIMENSION
    1.   Increased involvement in general policy making
    2.   Increased ability in influencing subordinates
    3.   Increased ability in influencing supervisors
    4.   Increased involvement in special duties or assignments
    5.   Increased ability in dealing with the community
    6.   Increased involvement in job-related committees

IV   THE COLLEGIAL DIMENSION
    1.   Increased association with other professionals in the
          teaching field
    2.   Increased opportunity to socialize with other
          professionals outside the teaching profession
    3.   Increased colleagues' interest in own work
    4.   Improved working relations with teachers

V   THE RECOGNITION-SUPPORT DIMENSION
    1.   Increased recognition by supervisors
    2.   Increased recognition by subordinates
    3.   Increased recognition by other colleagues
    4.   Increased recognition by the community
    5.   Increased staff support.

VI   THE PERSONAL DIMENSION
    1.   Improved awareness of local conditions related to work
    2.   Improved reading and study interests
    3.   Improved skills in arguments and critical thought
    4.   Improved work pace
    5.   Improved problem solving abilities
    6.   Improved self image
    7.   Improved job satisfaction
    8.   Improved professional autonomy
    9.   Improved personal comfort

VII   THE ECONOMIC DIMENSION
    1.   Increased opportunity for occupational promotion
    2.   Increased chances for advanced training
    3.   Increased opportunity for other civil service positions
    4.   Increased level of job security
    5.   Increased opportunity for salary advancement

The above 49 variables were   measured on a 6-point equal-

interval-Likert scale where: 1=disagree strongly, 2=disagree, 3=

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tend to disagree, 4=tend to agree, 5=agree, and 6=agree strongly.

In addition to the closed-ended items, the respondents also had the opportunity to respond to open-ended questions. After each satisfaction dimension was scored using the Likert scale, the questionnaire allowed some space for respondents to write in comments. In so doing, it was hoped to capture vital information which might not have been addressed by the dimension variables. This is further supported by Cox (1977); p. 29) who feels that these types of questions:

> ... provide graduates with the opportunity to state their perceptions of program strengths and weaknesses as well as their recommendations for program improvement (Cox, 1977; p. 29).

The second part of the questionnaire was essentially concerned with demographic characteristics and school background. The purpose was to determine whether any of the demographic or school factors were significant in influencing the participants' perceptions of the in-service programme. Table 16 shows the items contained in part two of the questionnaire.

TABLE 16
Heads' Demographic and School Background Factors

I. PERSONAL FACTORS AND CHARACTERISTICS OF THE HEADMASTER/
   HEADMISTRESS

   1. Sex: Male/_____/ Female/_____/
   2. Age group: 25-30 /_____/, 30-35 /_____/, 35-40 /_____/
                 45-50 /_____/, Over 45 /_____/

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TABLE 16 (continued)

3. Highest academic qual. (a). Sec: J.C. /_____/
                           (b). MCE or CSC /_____/
4. Experience as Headmaster/Headmistress:
   Less than 5 yr /_____/ 5-10y /_____/ 10-15y /_____/
   15-20y /_____/ Over 20y /_____/
5. Teaching experience: Less than 5y /_____/ 5-10y /_____/
   10-15y /_____/ 15-20y /_____/ Over 20y /_____/
6. What is your teaching load, in periods per week?
   Less than 10 /_____/ 10-20 /_____/ 20-30 /_____/
   30-40 /_____/ Over 40 /_____/

7. How many in-service courses have you conducted for your
   staff this school year? None /_____/ One /_____/
   Two /_____/ Three /_____/ More than three /_____/

8. Give examples of topics covered during the in-service
   courses that you conducted.

9. How many staff meetings have you conducted this school
   year? Once per term /_____/ Twice per term /_____/
   Three times per term /_____/ More than three times per
   term /_____/

10. State the purposes of such meetings.

II SCHOOL FACTORS AND CHARACTERISTICS

1. Type of school: Urban /_____/ Model /_____/ Rural/_____/

2. Number of teachers at your school: 1-5 /_____/
   5-10 /_____/ 10-15 /_____/ 15-20 /_____/ 20-25 /_____/
   Over 25 /_____/

3. Total number of pupils at school:
   Less than 400 /_____/ 400-800 /_____/ 800-1200 /_____/
   1200-1600 /_____/ 1600-2000 /_____/ Over 2000 /_____/

4. Average class size: Less than 20 /_____/ 20-40 /_____/
   40-60 /_____/ 60-80 /_____/ 80-100 /_____/
   Over 100 /_____/

5. How many classes are located in rooms and how many in
   the open air? Room /_____/ Open Air /_____/ (Please
   indicate number).

TABLE 16 (continued)

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6. Availability of teaching materials in schools where
   1=does not apply, 2=not adequate, 3=needs improving,
   and 4=inadequate.
   (a) Reference books or manuals
   (b) Library resources
   (c) Pupil books in Arithmetic
   (d) Pupil books in English
   (e) Pupil books in Chichewa
   (f) Pupil books in Science and Health Education
   (g) Pupil books in Social Studies
   (h) Notebooks
   (i) Chalkboards
   (j) Chalk
   (k) Pictures and charts

It should be remembered that this study was addressed to two
sets of people: the trained School Heads and Inspectors in
Malawi. Therefore, two sets of questionnaires were
administered. However, it should further be explained that,
since both sets of participants sat in the same classes and
learned the same curricula, Part One of both instruments was the
exact copy of the other. It was Part Two of the questionnaire
which was different since it focused on the background
characteristics of the respondents involved in the investigation.
The background characteristics of the School Heads are different
from those of the Inspectors. Thus, Part Two of the Inspectors'
questionnaire was as follows:

TABLE 17
Inspectors' Demographic and School Factors

I. PERSONAL FACTORS AND CHARACTERISTICS OF THE D.I.S.
OR D.H.E.O

1. Sex: Male/_____/ Female/_____/
2. Age group: 25-30/_____/ 30-35/_____/ 35-50/_____/
   40-45/_____/ Over 45/_____/
3. Highest academic qual. (a) Sec:J.C.,/_____/MCE or
   CSC/_____/ A-Levels/_____/ (b) Univ:Diploma/_____/
   Degree/_____/
4. Did you serve as headmaster/headmistress before?
   Yes/_____/ No/_____
5. If Yes, how long did you serve for: Less than
   5y/_____/ 5-10y/____/ 10-15y/_____/ 15-20/_____/ More
   than 20y/_____/
6. How long did you serve as classroom teacher? Less than
   5y/_____/5-10y/_____/ 10-15y/_____/ 15-20y/____/ More
   than 20?_____/
7. Experience as D.I.S./D.H.E.O: Less than 5y/_____/
   5-10y/_____/ 10-15y/_____/ 15-20y/_____/ More than
   20y/_____/
8. Which is your busiest term for inspection and
   supervision? 1st/_____/ 2nd/_____/ 34d/_____/
9. How many visits do you make in a week: One/_____/
   Two/_____/ Three/_____/ Four/_____/ More than
   four/_____/
10. How many schools do you actually see in a week? Less
    than 5/_____/ 5-10/_____/ 10-15/_____/ 15/20/_____/
    More than 20/_____/
11. List some of the more common problems that you find in
    the schools _____
    _____
12. How many in-service courses have you conducted this
    school year? None/_____/ One/_____/ Two/_____/
    Three/_____/ More than 3/_____/
13. What topics did you cover during the inservice courses?
    _____
    _____

TABLE 17 (continued

II. SCHOOL FACTORS AND CHARACTERISTICS

Directions: Rate the availability of teaching materials
                in those schools that you have visited this
                school year using the following scale:
                1 = Does not apply   2 = Not adequate;
                3 = Needs improving   4 = Adequate

Please circle the number that applies.

1.	Reference books or manuals	1 2 3 4
2.	Library resources	1 2 3 4
3.	Pupil books in Arithmetic	1 2 3 4
4.	Pupil books in English	1 2 3 4
5.	Pupil books in Chichewa	1 2 3 4
6.	Pupil books in Science & H.educ.	1 2 3 4
7.	Pupil books in Social Studies	1 2 3 4
8.	Notebooks	1 2 3 4
9.	Chalkboards	1 2 3 4
10.	Chalk	1 2 3 4
11.	Pictures and charts	1 2 3 4
12.	List items that the schools you have visited this school year would need most for the coming school year.	

Other important characteristics of the questionnaires
included the use of directions and a low level of vocabulary.
The use of directions is important in guiding respondents on what
to do about the items contained in the research instruments.   It
also attempts to provide standard conditions of instrument
administration (Gay, 1987).   In this way, the researcher believed
he would obtain comparable information.   The use of a low level
of vocabulary promotes a high level of comprehension of the
questionnaire. Copies of the questionnaires can be found in
Appendix E.

It was also mentioned that the study would survey the
perceptions of a sample of teachers working under some of the

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trained School Heads. To achieve this end, the following interview schedule was used.

TABLE 18
Interview Schedule for Use With a Selected Sample
of Primary School Teachers

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1. What sort of things is your headmaster/mistress able to do now that s/he was not able to do before attending the course at Domasi?

2. How often has s/he assisted you in professional duties? For example, how often has s/he assisted you in lesson preparation?

3. How often has s/he observed you giving a lesson in class?

4. How often has s/he conducted in-service courses for the school staff?

5. In what manner are staff meetings conducted?

6. How would you rate your school now on the following scale: excellent, good, fair, poor, and extremely poor, with respect to:
    (a) Headmaster/mistress-staff relations
    (b) Teacher-teacher relations
    (c) Teacher-student relations
    (d) Headmaster/mistress-student relations
    (e) School-community relations

7. How has the staff benefited from the Head's training?

8. Is there anything which has not been covered that you wish to mention?

It should be reiterated that the training for the Headteachers and School Inspectors in Malawi continues to focus on two major purposes. The first purpose is to develop in the trainees' attitudes, knowledge, and skills in the areas of administration, inspection and supervision, and school

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leadership. The second is to enable them, upon the completion of the programme, to train others in the schools (Malawi Institute of Education, 1985). The hope is to improve the teaching and learning processes in the school system. These purposes are frequently described in the literature as the enhancement or growth function of training and development (Havelock and Havelock, 1973; Joyce and Showers, 1988; Smylie, 1988) and also as the transferability function of training programmes (Havelock and Havelock, 1973). Thus the questions in the above schedule were asked in order to seek evidence of professional growth and transferability of learning to the trainees' home environment - the school settings.

VALIDITY AND VALIDATION OF DEVICES

Validity is an important characteristic which every research measure must possess and which, also, every investigation must report (Ary, et al., 1985).

Validity is the extent to which an instrument measures what it is supposed to measure (Ary, et al., 1985; Borg and Gall, 1983). There are 3 main types of validity: content validity, criterion-related validity, and construct validity (Ary, et al., 1985). For the purposes of this study, only the first and the last types of validity are considered relevant for the discussion.

Content Validity

Ary and his colleagues (1985), and Borg and Gall (1983) all state that content validity is the degree to which the instrument represents the content it is designed to measure. To possess content validity, a measure must adequately sample the content area that it has planned to measure. This type of validation involves judgment. It involves carefully and critically examining the sample items as they relate to the intended content area. It is even recommended that the instrument designer should obtain an external evaluation of the content validity of the data gathering procedure by asking a number of experts or other teachers to systematically examine the instrument and evaluate its relevancy to the specified content (Ary, et al., 1985). If all the members of the evaluation panel reach consensus that the items adequatley represent the content domain, the measurement device can then be said to prossess content validity.

Construct Validity

Construct validity is the degree to which a particular measure, be it a test or any other procedure for collecting information, assesses a hypothetical construct (Ary, et al., 1985; Borg and Gall, 1983). Such concepts as intelligence, motivation, anxiety, satisfaction, creativity, and self-concept are common examples of constructs because, according to Borg and Gall (1983; p. 280): "they are not directly observable but rather are inferred on the basis of their observable effects on behavior."

There are a variety of procedures that may be used to establish the construct validity of an instrument. Two of these procedures may be described. One approach is to ask if the elements the device measures are the elements that constitute the concept (Ary, et al., 1985). If the reviewers of the items contained in the instrument are unanimous that these are the elements that make up the construct, the measure can then be described as possessing a construct validity. The other procedure suggested by Ary and his colleagues (p. 219): "... is to inspect the items to determine if they seem appropriate for assessing the elements in the construct." By implication, if the items appear relevant, then the measure has construct validity and the reverse equally applies. From these descriptions, it is clear that construct validity is a further extension or development of content validity. This is even supported by Ary, et al., (1985) who state that construct validity includes content validity as well.

This background guided the instrument designer in his effort to validate the research tools employed in this inquiry. Great care was taken to construct valid information gathering instruments, namely, a survey questionnaire and an interview schedule. After considerable editing, the questionnaire was presented to members of the researcher's thesis committee and classmates in order to establish construct validity. The thesis committee consisted of university professors and the researcher's

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classmates were both graduate students as well as practising teachers in Manitoban schools in Canada. Thus, it is reasonable to assume that both sets of persons were familiar with the design of questionnaires. One of the most important issues that the committee raised was in connection with the 7 specified dimensions of satisfaction, namely, "achievement of knowledge and skills", "job-performance", "administrative", "collegial", Recognition-support", "personal" and "economic" dimensions. More specifically, the thesis committee wanted to know from the instrument designer how these particular dimensions were arrived at. The reason was to find out how the dimensions related to the concept of satisfaction, and also how the 7 elements of satisfaction were related to the training programme in Malawi which this study evaluated. It was explained that the specified elements of satisfaction were derived from a critical review of pertinent literature, particularly the works of Herzberg and Maslow. It was also further elaborated that the specified domains of satisfaction represented the goals and structures of a training and development programme such as the MIE-BU Programme.

The reviewers also critically examined all the items in the questionnaire in order to check whether they were relevant, specific, too vague or too long. This process resulted in some items being added, modified, or deleted. For example, one of the 7 dimensions of satisfaction was specified as the "convenience" dimension. The committee felt that the term was meaningless and therefore, advised the researcher to use the term "personal"

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for that dimension. Terms like "several", "most", and "usually" were recommended for exclusion since they do not have precise meanings and therefore they can mislead research participants. The use of sexist language like "headmaster" was discouraged because such language is discriminatory. The researcher was, therefore, advised to use such terms or term phrases as "school head" or "headmaster/headmistress". Items that represented two different ideas and yet claimed one response had to be separated into two independent items because it is possible that a respondent may agree with one aspect and disagree with the other. To illustrate, items such as "planning and staff development" and "my work pace and problem solving abilities" which appeared under "achievement" and "personal" dimensions had to be separated into 4 independent items: "planning", "staff development", "my work pace", and "my problem solving abilities".

The reviewers further recommended that each set of dimension items be introduced by a stem such as "I feel that the programme has improved my knowledge and skills in": and the item to be measured on a scale of 1 to 6 would then follow. In this way, the respondent would be caused to really feel that he/she was measuring his/her attitude toward the item. This is consistent with Burroughs' (1971) suggestion that validation should also include a consideration of the way the research measure is administered. This item screening evaluation exercise was conducted 3 times until the thesis committee was satisfied with

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the instrument. This process resulted in a 4-paged questionnaire that was considered satisfactory for assessing the feelings of in-service participants in Malawi.

Validation is also concerned with ensuring that a measure is suited to its intended target audience (Burroughs, 1971). This principle influenced the researcher to further validate the instrument in Malawi where it was intended for use. The justification was that the people who had participated in the validation of the device were Canadians who were unfamiliar with the conditions in Malawi. Further, since the reviewers were Canadians, it implied that the instrument contained some problems. These people were members of a different culture from that of the research subjects in Malawi. Thus, they were different from the Malawian subjects in many ways. Chief among these aspects were levels of education and language. As already stated, the thesis committee consisted of university professors and the members of the researcher's class were graduate students. Further, these people spoke English as their first language. On the other hand, the research participants in Malawi, for whom the instrument was validated, had attained only 4 years of secondary education plus 2 years of primary teacher education. Additionally, in Malawi, English is taught as a second language. Thus, there was a possibility that the approved instrument could have been tuned above the level of understanding of the study participants. To help to deal with this possibility, the instrument was subjected to the further evaluation and revision

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in Malawi before its administration to the target audience.

For this purpose, the researcher used a small group of School Heads and Inspectors (N=10) who were at the Institute of Education participating in another session of the MIE-BU In-service Programme. This sample was in many ways similar to that of the planned research subjects. For example, they were similar in terms of educational background and training, teaching experience, and the positions they occupied within the Malawi educational system. Both the sample and the research participants had 4 years of secondary education followed by 2 years of teacher education and training. It was, therefore, reasonable that their command of the English language was assumed about the same. Further, the members of both groups were also similar in teaching experience since in Malawi, one cannot be promoted to the position of a School Head or Inspector unless one has taught for at least 3 years.

The researcher, with this sample of School Heads and Inspectors, examined the questionnaire item by item, including the directions as well. The group was advised to look for any difficult or unclear words; vague or unclear statements; inaccurate information or anything wrong or culturally unacceptable. After approximately 40 minutes, it was learned that the items were clear and straightforward. As a result, the researcher felt that no changes were needed.

It should also be reported that the interview schedule for

use with the primary school teachers who worked under the trained Headteachers was tested in a similar manner. No changes were made in Malawi after the measure was validated in Canada.

ADMINISTRATION OF THE INSTRUMENTS

The survey instruments were administered in two stages. Data arising from the questionnaire were collected during the period May-July, 1988, whereas the information sought out through the interview survey was obtained during the month of August, 1988. This procedure was undertaken to ensure that the interviews did not interfere with the completion of the questionnaires. Thus, around mid-May, 1988, 145 instruments were mailed to all the study participants (N=145) along with a covering letter describing the purpose of the study, and assuring the respondents of confidentiality, the right to privacy, and freedom to discontinue the study (see Appendix F). The reason usually given for including a covering letter when using this type of research procedure, is to improve the response rate (Robin, 1965). Of the above total of 145, 71 were Heads of primary schools and the remainder (N=74), were School Inspectors. Further, 115 were male and 30 were female. By the end of July, 1988, 114 respondents returned the completed questionnaires according to the following break-down: 54 were obtained from the School Heads and 60 from the Inspectors; 95 were submitted by male respondents and 19 by the female participants. The total of 114 survey instruments received represented a return rate of

79%.   This rate exceeded the 70% return rate which is considered a reasonable response rate (I.S.E.R., 1984). Thus, 21% of the research participants did not turn in their evaluations.

Two factors may explain why 21% of the study's population failed to return the evaluations. First, it was later learned that some of the MIE-BU graduates had been transferred to new workplaces in the country since the completion of their in-service training at Domasi. This meant that such participants did not receive the research mail since it was directed to their old addresses. Re-direction of the mail to the new addresses depended very much on the cooperation of the new incumbents. Thus, it can be suspected that some of the research devices were lost in the mail. Second, and importantly, as Ross (1984) remarks, the issue of population inaccessibility in the developing world should be recognized when performing research. For example, in Malawi there are still some areas where, because of difficult terrain such as deeply and extensively dissected mountainous areas, a lack of adequate infrastructure such as a well developed road-network system, and conveniently located postal facilities, it is extremely difficult for the quick delivery of mail. In such areas, mail may take four to five months before it reaches the addressee. It was therefore possible that, even by the end of July, 1988, which was the proposed time-limit for questionnaire data collection, some of the study instruments were still on their way to the research

subjects.   Thus, participants who worked in geographically
difficult areas probably did not receive the evaluation measures
on time.

Following the return of the evaluation questionnaires at the
end of July, 1988, the researcher embarked on the interview
surveys with selected primary school teachers who worked under
some of the MIE-BU graduates. The motive was to obtain another
piece of evidence about their work in the school system. The
original plan was to select a sample of 15 teachers from the 4
districts of Malawi, namely: Blantyre, Chiradzulu, Machinga and
Zomba. These districts were selected on the basis of ease of
access, since the sample of the teachers could easily be reached
from the Malawi Institute of Education where the inquirer was
based. Before the survey began, it was understood that the
majority of the primary teachers in the nation were scheduled to
convene in the town of Zomba shortly in the first week of August,
1988.   The purpose of the educational convention was the marking
of the Malawi Primary School Leaving Certificate Examinations
that were written by Standard 8 pupils in July, 1988. This was
the first time that the marking of the primary examinations was
to be undertaken in Zomba Town, a fact that reflected the re-
organization of the Ministry of Education's functions as
specified in the 1985-1995 Education Development Plan.

This was useful in two ways. The town of Zomba is only 10
miles away from the Malawi Institute of Education at Domasi.
Therefore it was not difficult to reach the teachers in the

marking centres in Zomba. The other advantage was that conducting the interview surveys with the teachers in settings away from their schools helped to ensure privacy, so that the informants might feel easier in providing the required information during the conferences. At the same time, however, this meant that it was no longer possible to hold the discussions with the sample of the 15 teachers from the identified 4 districts as had been prearranged. Therefore, the plan was modified. The investigator visited each of the 3 marking centres in Zomba and held the research-focussed discussions with only 8 teachers who operated under the graduates of the programme.

DATA ANALYSIS AND PRESENTATION

A goal of evaluation is to inform practical decision-making. This purpose applies to data analysis also (Patton, 1982) since the process provides evaluation information which allows programme decisions to be made by decision-makers. This suggests that the presentation of evaluation data is best done in a simple, straight-forward, easy-to-comprehend fashion, so that the intended users can understand the findings more easily.
Thus, in this study, questionnaire raw data were coded and then entered into a computer for storage. The data were then summarized in accordance with the research questions. Finally, the results were reported in the form of tables known as descriptive statistics.

CHAPTER V

RESULTS AND DISCUSSION

REVIEW OF THE THESIS QUESTIONS

The inquiry was an assessment of participants' feelings of satisfaction with the MIE-BU Teacher Project in Malawi. The trainees consisted of selected School Heads and Inspectors working in the primary educational system in the country. The participants graduated from the in-service programme in 1986 and 1987. The present investigation was, therefore, undertaken in order to seek answers to the following points of concern which relate to the training received by the participants in Malawi.

1. (a) To what degree are the graduates satisfied with the in-service training programme that they received at the Malawi Institute of Education at Domasi?

(b) What is the participants' ranking of satisfaction along the following dimensions?

(i)	Achievement of academic knowledge and technical skills dimension
(ii)	Job-performance dimension
(iii)	Administrative dimension
(iv)	Collegial dimension
(v)	Recognition-support dimension
(vi)	Personal dimension

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(vii)   Economic dimension

(c) For each dimension, which areas reveal a relatively high and low degree of satisfaction?

2.   Are there any differences in levels of satisfaction between:

(a) The first graduates who completed the in-service training programme in 1986 and the second graduates who finished in 1987?

(b) Heads and Inspectors?

(c) Heads of urban, model, and rural schools?

(d) Heads of large schools and Heads of small schools?

(e) Male and female graduates?

(f) Older and younger graduates?

3. To what extent are the graduates involved in operating in-service training programmes for the teachers in the school system?

Through the questionnaire survey and in-depth interviews, the following results were obtained.

RESULTS OF THE QUESTIONNAIRE SURVEY

In presenting the findings of the study, two important considerations must be kept in mind. First, in this research, the concept of satisfaction was assessed according to the 7 dimensions presented in Table 19 below.

TABLE 19
Dimensions of Satisfaction

---

1. Achievement of academic knowledge and technical skills.

2. Job performance.

3. Administrative

4. Collegial

5. Recognition-support

6. Personal

7. Economic

It should also be mentioned that each of these dimensions was further divided into sub-dimensions which were rated on a six-point equal-interval Likert scale, where: 1 = disagree strongly; 2 = disagree; 3 = tend to disagree; 4 = tend to agree, 5 = agree; and 6 = agree strongly.

Last, it should be explained that in analysing the questionnaire data, scores of 5 and 6 were interpreted as representing feelings of high satisfaction (HS); scores of 3 and 4 implied moderate feelings of satisfaction (MS); and finally, scores of 1 and 2 indicated feelings of low satisfaction (LS).

Participants' Perceptions of Satisfaction

The analyses of the 114 questionnaires that were received produced the findings presented in the table which follows.

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TABLE 20
Participants' perceptions of satisfaction
with in-service programme

		% HS 6-5	% MS 4-3	% LS 2-1	Mean
HS = High Satisfaction MS = Moderate Satisfaction LS = Low Satisfaction					
1.	Achievement Dimension	87.0	11.6	1.4	5.3
2.	Job-performance Dimension	86.5	12.1	1.4	5.3
3.	Collegial Dimension	82.4	15.4	2.2	5.1
4.	Personal Dimension	79.8	17.0	3.2	5.0
5.	Administrative Dimension	75.0	20.7	4.3	4.9
6.	Recognition-support Dimension	72.0	23.4	4.6	4.9
7.	Economic Dimension	46.1	32.4	21.5	4.0
Grand Mean		75.5	19.0	5.5	4.9

Overall, the participants obtained satisfaction from attending the MIE-BU Teacher In-service Programme since a grand mean score of 4.9 as shown in Table 20 is quite high. The grand mean is very close to the score of 5 which, according to earlier assumptions, signifies participants' feelings of high satisfaction with the in-service training in which they participated. This point is further strengthened by the fact that 75.5% of the research subjects (N=86) who responded to the study rated their degree of satisfaction with the programme at points 5 and 6 of the measurement scale. This indicates that the

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majority of the research participants were satisfied with the training that they had received.

Other observations are also in order. About 19.0% of the respondents (N=22) were moderately satisfied with their training. Approximately 5.5% of those who completed and returned the research instruments (N=6) indicated very low levels of satisfaction. Thus, generally, the graduates derived satisfaction from the programme as suggested by a 75% majority who indicated their levels of satisfaction at the positive end of the scale.

Table 20 also suggests that the respondents were most pleased with the teacher in-service programme as it contributed to their achievement of knowledge and skills (note 87% agreement and a mean score of 5.3); job performance (86.5% support and a mean of 5.3); increased opportunities for collegial associations (82.4% and a mean of 5.1); personal growth (79.8% and a mean of 5.0); increased administrative involvement (75.0%) and a mean of 4.9); and increased feelings of recognition-support (72.0% and a mean of 4.9). Thus, the trainees recognized the importance of the training in regard to these dimensions.

On the other hand, it is also evident from the data exhibited in the above table that the in-service graduates were least satisfied with: the economic dimension. Although the in-service participants reacted negatively to the economic dimension, it can be argued that their assessment of this

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dimension was unfair. The researcher's experience provides evidence that some of the trainees were promoted to senior positions within the education system as a result of this training.

Areas of Relatively High and Low Degree of Satisfaction

The table that follows suggests evidence regarding areas of relatively high and low degree of satisfaction.

TABLE 21
Participants' perceptions of satisfaction with in-service programme: an examination of areas of relatively high and low degree of satisfaction for each of the dimensions

	HS=High Satisfaction MS=Moderate Satisfaction LD=Low Satisfaction			
	%	%	%	
ACHIEVEMENT OF ACADEMIC KNOWLEDGE	HS	MS	LS	
AND TECHNICAL SKILLS DIMENSIONS	6-5	4-3	2-1	Mean
Dimension Variables:				
Rank				
1. Understanding the learning process	93.8	6.2	0.0	5.4
2. Supervision	93.7	6.3	0.0	5.6
3. Evaluation	91.9	7.2	0.9	5.4
4. Interpersonal relationships	89.7	10.3	0.0	5.4
5. Planning	88.8	10.4	0.8	5.3
6. Communication	87.7	12.3	0.0	5.4
7. Staff Development	87.2	11.0	1.8	5.2
8. Academic content (subject areas)	63.3	28.8	7.9	4.6
DIMENSION MEAN	**87.0**	**11.6**	**1.4**	**5.3**

THE JOB PERFORMANCE DIMENSION
Dimension Variables:
Rank

1. Increased confidence	95.7	4.3	0.0	5.7
2. Improved skills in evaluating teaching and learning performance	93.7	5.5	0.8	5.5
3. Increased ability in improving teaching and learning performance	93.0	6.2	0.8	5.4

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TABLE 21 (continued)

	HS=High Satisfaction MS=Moderate Satisfaction LD=Low Satisfaction			
4. Improved interpersonal-communication skills	89.6	10.4	0.0	5.2
5. Improved interpersonal relationships with staff	88.9	8.6	2.5	5.3
6. Increased creativity	86.9	13.1	0.0	5.3
7. Improved ability in initiating and managing change	86.1	13.9	0.0	5.2
8. Improved skills in negotiating with staff in decision-making	84.7	14.4	0.9	5.3
9. Improved skills in conducting staff development	84.3	13.9	1.8	5.1
10. Improved abilities in solving institutional problems	83.6	14.6	1.8	5.2
11. Improved skills in school-community relations	80.3	17.9	1.8	5.1
12. Improved relations with supervisors	71.6	22.5	5.9	4.8
DIMENSION MEAN	**86.5**	**12.1**	**1.4**	**5.3**

THE COLLEGIAL DIMENSION

Dimension Variables:
Rank

1. Improved working relations with teachers	88.1	8.6	3.3	5.2
2. Increased association with other professionals in teaching field	86.9	10.4	2.7	5.2
3. Increased opportunity to socialize with other professionals outside teaching field	78.9	18.4	2.8	5.1
4. Increased colleagues' interest in my work	75.8	24.2	0.0	5.1
DIMENSION MEAN	**82.4**	**15.4**	**2.2**	**5.1**

THE PERSONAL DIMENSION
Dimension Variables:
Rank

1. Improved problem-solving abilities	94.1	5.9	0.0	5.4
2. Improved self-image	86.8	11.4	1.8	5.2
3. Improved work pace	86.0	12.2	1.8	5.1
4. Improved skills in arguments and critical thought	85.1	12.2	2.7	5.3

TABLE 21 (continued)

	HS=High Satisfaction MS=Moderate Satisfaction LD=Low Satisfaction			

		HS	MS	LD	
5.	Improved reading and study interests	84.2	14.0	1.8	5.2
6.	Improved awareness of local conditions related to work	79.6	19.6	0.8	5.2
7.	Improved job satisfaction	76.8	20.6	2.6	4.9
8.	Improved professional autonomy	76.7	19.8	3.5	4.9
9.	Improved personal comfort	49.2	36.8	14.0	4.2
DIMENSION MEAN		**79.8**	**17.0**	**3.2**	**5.0**

THE ADMINISTRATIVE DIMENSION
Dimension Variables:
Rank

1.	Increased ability in influencing subordinates	92.0	7.2	0.8	5.3
2.	Increased involvement in job-related committees	85.3	12.1	2.6	5.1
3.	Increased involvement in special duties or assignments	78.9	18.4	2.7	5.1
4.	Increased ability in dealing with the community	75.9	24.1	0.0	5.1
5.	Increased influence on supervisors	59.6	34.2	6.2	4.6
6.	Increased involvement in general policy making (e.g., curriculum decision making)	58.2	28.3	14.3	4.2
DIMENSION MEAN		**75.0**	**20.7**	**4.3**	**4.9**

THE RECOGNITION-SUPPORT DIMENSION
Dimension Variables:
Rank

1.	Increased recognition by subordinates	85.3	13.1	1.6	5.2
2.	Increased recognition by other colleagues	77.7	19.7	2.6	4.9
3.	Increased staff support	72.1	25.4	2.5	4.9
4.	Increased recognition by supervisors	64.8	24.9	10.3	4.6
5.	Increased recognition by the community	60.2	34.0	5.8	4.7
DIMENSION MEAN		**72.0**	**23.4**	**4.6**	**4.9**

TABLE 21 (continued)

	HS=High Satisfaction MS=Moderate Satisfaction LD=Low Satisfaction			

THE ECONOMIC DIMENSION
Dimension Variables:
Rank

	HS	MS	LD	
1. Increased chances for advanced training	56.2	30.9	12.9	4.4
2. Increased opportunity for occupational promotion	50.5	27.3	22.2	4.0
3. Increased level of job security	48.9	37.4	13.7	4.2
4. Increased opportunity for other civil service positions	46.2	32.3	21.5	4.0
5. Increased opportunity for salary advancement	28.8	34.2	37.0	3.3
DIMENSION MEAN	**46.1**	**32.4**	**21.5**	**4.0**

N=114

Taking each dimension one at a time, the following points may be noted. The ranking of the variables or sub-dimensions of the achievement dimension indicates that the research participants acknowledged that the MIE-BU Teacher Project advanced their knowledge and skills in such areas as: understanding of the learning process (93.8% and a mean of 5.4); supervision of learning in the schools (93.7% and a mean of 5.6); evaluation of learning (91.9% and a mean of 5.4) and so on. There is also further evidence to the fact that the trainees who graduated from the teacher in-service programme were not completely happy with the breadth of coverage of the academic content areas (63.3% and a mean of 4.6). The academic content areas refer to the primary curriculum subjects which are offered in the school system. The regular schools offer 12 primary

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curriculum subjects, whereas the special schools offer up to 13 or 14. The training programme enabled the trainees to study only 2 out of the list of 12 or 14 subjects. Since these people are general educators in the Malawi primary education system, it may be that the reduced support for this variable owed much to the fact that they felt inadequately prepared for the primary curriculum. They wished they had studied more than 2 primary subjects during their attendance at the in-service.

An examination of the job performance dimension shows that the School Heads and Inspectors who were involved in the training and the study reported being contented with the programme for its relevance to their work. The first 11 variables of the job performance dimension (that is, from "increased confidence" to "improved skills in school-community relations") were accepted satisfactorily. However, the respondents expressed less support for the variable on "improved relations with their supervisors" (71.6% and a mean of 4.8). They appear to indicate that the programme has not assisted them to build up or strengthen trainee-supervisor relations.

In Malawi, the supervisors for both the Heads and Inspectors are the District Educational Officers. These officers are in charge of primary school educational administration at the district level. This group of people was not involved in the project. Hence, one can suspect the development of psychological feelings of inferiority on the part of the district administrators. The district administrators could well share the

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feelings that the programme graduates are more knowledgeable than they themselves. Hence, they may feel threatened to lose their positions to some of the graduates.

An analysis of the collegial dimension as presented in Table 21 above exhibits similar patterns of relatively high and low degrees of satisfaction among the variables. The study reveals that the graduates agreed that the in-service teacher programme that they had received assisted them in: improving their work relations with teachers in the work setting (88.1% and a mean of 5.2), increasing their association with other professionals in the teaching field (86.9% and a mean of 5.2), and in increasing their opportunities to socialize with other professionals outside teaching (78.9% and a mean of 5.1). But there was slightly less support for the variable, "increased colleagues' interest in my work" (75.8% and a mean of 5.1), perhaps it may be due to professional jealousies. It should be understood that the Heads' colleagues are other School Heads who have not attended the in-service course; and similarly, the Inspectors' colleagues are the District Educational Officers and their assistants who have not been at Domasi for the MIE-BU Programme. Thus, it may be difficult for these persons to be interested in the work of the project's graduates.

A look at the personal dimension highlights these observations: that the participants valued the programme for improving their problem-solving skills (94.1% and a mean of 5.4),

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their self-image (86.8% and a mean of 5.2), their work pace (86.0% and a mean of 5.1), their skills in argument and critical thought (85.1% and a mean of 5.3), their reading and study interests (84.2% and a mean of 5.2) and other aspects (see above table). However, the variable on personal comfort received the least support (49.2% and a mean of 4.2). It is not surprising that the item was not very much supported because the factor of personal comfort is linked to such matters as fringe benefits, or salary advancement which the majority of these people claim not to have received.

The administrative component in the above table suggests trainees' satisfaction with their degree of influence on subordinates (92.0% and a mean of 5.3), their involvement in job-related committees in their workplaces (85.3% and a mean of 5.1), their involvement in special assignments such as the supevision of examination packing (78.9% and a mean of 5.1), and their abilities in dealing with the local school community (75.9% and a mean of 5.1). These findings mirror the impact of the programme. Further, it is also clear from the available evidence that the graduates' influence on their supervisors (59.6% and a mean of 4.6) as well as their participation in general policy-making, such as curriculum decision-making was low (58.2% and a mean of 4.2). These findings are consistent with an earlier observation. For example, the analysis of the job-performance dimension disclosed unsatisfactory perceptions between the graduates and their supervisors. Given this additional fact, it is doubtful

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that the graduates can be effective in influencing their bosses in decision-making concerning matters affecting primary education. Poor relations between the supervisors and the supervisees (i.e. the graduates) further result in the trainees' non-involvement in general policy-making since it is the District Educational Officers who recommend names of individuals to the Ministry for their consideration in policy-oriented activities.

In reference to the recognition and support dimension, the respondents reported recognition of their achievement by their subordinates (85.3% and a mean of 5.2), other colleagues working in various government departments (77.7% and a mean of 4.9), and the teaching staff (72.1% and a mean of 4.9). They also reported less recognition by their supervisors (64.8% and a mean of 4.6) and the local community (60.2% and a mean of 4.7). There is less recognition and support from the local people on the grounds that the primary schools pass few students to secondary schools each year. Thus, the local communities believe that the schools fail to pass the students to secondary education, when in fact, the real reason is limited secondary school places.

Finally, the respondents indicated least satisfaction with in-service with respect to its potential to enhance opportunities for econimic enhancement. Not many of the graduates saw the training as a stepping stone for further training (56.2% and a mean of 4.4) for two important reasons. First, in Malawi, it is hard for one to be considered for additional training once one

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has just completed a cycle of training. Second, there are many

people who would like to go for further education, but there are

very few openings. These factors explain the low rating for this

variable. Also, not many believed that the training they

received opened up their opportunities for occupational promotion

(50.5% and a mean of 4.0) since the issue of occupational

promotion for the teachers and others working on the various

government sectors is handled by a separate authority – the

Department of Personnel and Training. On the advice of the

Ministry of Education, this division of the government creates

senior positions for the educators. These posts are then

advertised in the local papers. Qualified persons are called to

report for interviews. There could be as many as 500 teachers

for only 30 posts. Thus, the question of opportunities for

occupational promotion is a distant dream for many of the

graduates.

The issue of job security was perceived negatively as well

(48.9% and a mean of 4.2). The majority of the graduates did not

acknowledge the in-service training as a source of job security.

Since teachers in Malawi are civil servants, they are subjected

to the same rules, regulations, and conditions of service as the

other members of the civil service. Thus, participation in any

form of training by a teacher or anybody in the civil service

would not provide one with any additional security on the job.

Similarly, low degrees of satisfaction were also reported with

respect to the two variables: "increased opportunity for other

civil service positions" (46.2% and a mean of 4.0), and "increased opportunity for salary advancement as a result of the training" (28.8% and a mean of 3.3).

Perceptions of First and Second Graduates Compared

Of the 114 questionnaires which were received and then analysed in accordance with the specific purposes of the study, 76 questionnaires came from the first graduates who had ended their studies in 1986, and 38 from the second graduates who had finished in the following year, 1987. The following table presents summaries of the reactions of the two groups toward the in-service training.

Table 22
Comparative Participant Perceptions of In-Service
Programme: First and Second Graduates

HS	=	Satisfied		
MS	=	Moderate Satisfaction	(F)	= % of first graduates
LS	=	Low Satisfaction	(S)	= % of second graduates

D I M E N S I O N S		% HS 6-5	% MS 4-3	% LS 2-1	Mean
I. Achievement of Academic Knowledge and Technical Skills Dimension					
	(F)	87.7	11.0	1.3	5.3
	(S)	84.9	13.8	1.3	5.2
II. The Job Performance Dimension					
	(F)	86.4	12.2	1.4	5.3
	(S)	86.0	12.5	1.5	5.2
III. The Administrative Dimension					
	(F)	73.5	21.7	4.8	4.9
	(S)	74.1	22.4	3.5	4.9
IV. The Collegial Dimension					
	(F)	83.2	14.1	2.6	5.2
	(S)	80.3	18.4	1.3	5.1
V. The Recognition-Support Dimension					
	(F)	69.5	25.5	5.0	4.8
	(S)	72.6	23.2	4.2	4.8
VI. The Personal Dimension					
	(F)	82.5	14.9	2.6	5.1
	(S)	73.4	22.2	4.4	4.9
VII. The Economic Dimension					
	(F)	40.0	36.8	23.2	3.8
	(S)	55.8	24.7	19.5	4.2

Both groups of graduates showed degrees of convergence and divergence in their opinions regarding the training programme as measured along the 7 dimensions. The members of the first group of graduates who responded to the study (N=76), and those of the second group (N=38), reported high agreement in their levels of satisfaction with the programme only along 3 dimensions. They indicated high satisfaction with the achievement of knowledge and skills (87.7% and 84.9%), the appropriateness of the new learnings to their job performance (86.4% and 86.0%), and the collegial dimension (83.2% and 80.3%). There was also concurrence in their perceptions of high satisfaction along the administrative dimension (73.5% and 74.1%), and the recognition-support dimension (69.5% and 72.6%), though comparatively lower than in the above cases.

There were small differences in participants' reactions along both the personal and economic dimensions. The first graduates registered high levels of satisfaction with the personal dimension (82.5%) whereas, on the other hand, the rating of the second graduates along the same dimension was slightly lower (73.4%). The following explanation is in order.

The primary school teachers in Malawi are graded as follows:

T1	= Promotional post
T2	= 4 years of secondary education and 2 years of teacher training
T3	= 2 years of secondary education and 2 years of teacher training

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T4	= 8 years of primary education and 2 years of teacher training
T5	= 5 years of primary education and 2 years of teacher training
Temporary Teachers	= Untrained/various educational qualifications.

T1 is a promotional post from the T2 or T3 grade. The School Heads in the country are either T1, T2 or T3. There are also Deputy Heads, who hold the grade of T1. When the MIE-BU Teacher Project was under plan, it was agreed that the retraining programme would be focused on the School Inspectors and the School Heads with T1 and T2 grades, first beginning with the T1 Heads. The first 1984 intake of participants exhausted the numbers of heads with the T1 rank. Because of staff turn-over at the Ministry Headquarters, the policy for selecting candidates for training was not followed. Thus, during the second intake of 1985, the project received some students who were Deputy Heads with T1 rank. Their numbers are not available. These people completed the training in 1987 and they are a part of the 38 second graduates who responded to the study. A further re-examination of the questionnaire raw data confirms low scores of 1 and 2 along the 6-point scale for the following variables of the personal dmension: "improved job satisfaction", "improved professional autonomy", and "improved personal comfort or satisfaction". It is possible that such low scores were a result of the evaluations of this set of people. These people felt

feelings of frustration because they could not exercise their professional autonomy under their untrained School Heads. In turn, this affected their perceptions of job satisfaction and personal comfort. This may have helped to further reduce their overall satisfaction with the personal dimension.

Additionally, 11 out of the 38 second graduates were female Inspectors known as District Home Economics Organizers. They are charged primarily with the supervision of specific home economics subjects, such as house-craft and needlework. These subjects are offered in selected primary schools in the country. Such subjects require the provision of material resources for their effective implementation in the school system. The persons to influence policy in this direction are the District Home Economics Organizers. But economic realities are such that it is difficult to provide schools with adequate resources to support the teaching of these subjects. Although a lack of adequate instructional materials is general in the Malawi Primary Educational System, it is much worse in the home economics area, where books and appropriate materials are lacking (Malawi Ministry of Education and Culture, 1987). By implication, a lack of materials in schools can limit a supervisor's professional autonomy in performing the advisory services. This condition can lead to frustration since a supervisor's opportunities for considering alternative solutions to a teacher's problem(s) become restricted. This further reduces the supervisor's levels

of job satisfaction and personal comfort. Similarly, a re-
analysis of the raw data disclosed low ratings of the same
variables: "job satisfaction", "professional autonomy", and
"personal comfort or satisfaction". The two reasons combined may
help to explain why the second graduates rated their feelings of
satisfaction along the personal dimension at 73.4%.

By contrast, the first graduates (N=76) were relatively
happy with all the variables of the dimension and this explains
why they favourably rated the dimension at 82.5%.

There was also a difference in participants' feelings of
satisfaction regarding the economic component. The evaluation of
this component by the first group of trainees gave a rating of
satisfaction of 40.0%, whereas, the second group rated the
dimension at 55.8%. First, it should be noted that both groups
rated the dimension very low, comparatively. Second, it should
be remembered that the economic dimension consisted of the 5
variables, namely: "increased opportunity for occupational
promotion", "increased chances for advanced training", "increased
opportunities for other civil service positions", "increased
level of job security", and "increased opportunity for salary
advancement". Both groups of graduates matched in their
evaluations of the variables: "increased chances for advanced
training", "increased opportunities for other civil service
positions", and "increased level of job security". The ratings
ranged from 1 to 2 on the measurement scale for reasons already
discussed in previous sections. However, the groups differed in

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their perceptions along the 2 sub-dimensions of "increased opportunity for occupational promotion", and "increased opportunity for salary advancement". Of the 76 respondents among the first graduates, 49 were school Inspectors. The highest promotional level that this group of people can hope to attain is that of a District Educational Officer only. By comparison, the School Heads, most of whom were among the second graduates (n=27), can hope to rise to the position of a School Inspector, an Assistant District Educational Officer, or a District Educational Officer. Thus, the members of the second group of graduates viewed "increased opportunity for occupational promotion" more favourably than their counterparts. This also influenced their evaluations of "increased opportunity for salary advancement". This explains why there was a difference in the rating of the economic dimension between the first trainees (40.0%) and the second (55.8%).

Perceptions of Heads and Inspectors

Of the 114 respondents, 54 were School Heads and 60 were Inspectors. Their comparative perceptions of the training programme are summarized below.

TABLE 23
Comparative perceptions of satisfaction with in-service
programme: School Heads and Inspectors

HS = High Satisfaction	(H) = School Heads
MS = Moderate Satisfaction	(Ins) = School Inspectors
LS = Low Satisfaction	

D I M E N S I O N S		% HS 6-5	% MS 4-3	% LS 2-1	Mean
1. Achievement of Knowledge and Skills	(H)	88.4	10.2	1.4	5.3
	(Ins)	85.6	12.9	1.5	5.3
2. The Job Performance Dimension	(H)	90.6	8.8	0.6	5.4
	(Ins)	82.5	15.4	2.1	5.1
3. The Administrative Dimension	(H)	78.4	17.3	4.3	5.0
	(Ins)	71.6	24.1	4.3	4.8
4. The Collegial Dimension	(H)	85.7	12.0	2.3	5.2
	(Ins)	79.2	18.7	2.1	5.2
5. The Recognition-Support Dimension	(H)	83.7	14.8	1.5	5.2
	(Ins)	60.3	32.0	7.7	4.5
6. The Personal Dimension	(H)	83.7	13.4	2.9	5.1
	(Ins)	75.9	20.6	3.5	5.0
7. The Economic Dimension	(H)	58.5	28.5	13.0	4.5
	(Ins)	46.1	32.4	21.5	4.0

N (Heads)   = 54
N (Inspectors) = 60

The School Heads' (N=54) responses indicated higher levels
of satisfaction along all the 7 dimensions. By implication, the
Heads appeared slightly more satisfied with the programme than
the Inspectors. This is not surprising. The Heads have never

had any in-service training throughout their period of service. The above data are representative of their positive feelings toward the MIE-BU Teacher In-service Programme. On the other hand, the Inspectors had some previous experience of in-service education. In the past, they attended short-time seminars/conferences organized by the Ministry of Education. They also participated in curriculum workshops conducted by the Malawi Institute of Education, although such experiences were not as systematic and formal as the MIE-BU In-service Project. Thus, there was not as much excitement with the programme on the part of the Inspectors. The other reasons already given in previous sections equally apply in explaining the differences in perceptions.

Perceptions of Heads of Urban, Model and Rural Schools

The programme involved Heads from the 3 types of primary schools in Malawi: urban, model and rural. The urban schools referred to those located in the cities of Blantyre, Lilongwe, and Mzuzu, as well as those in Zomba Town. On the other hand, the model schools were those insititutions which where built beginning in the 70's through the 80's in order to provide local communities with standards for erecting new schools. The rest of the schools which fell outside the two classes were considered rural.

Fifty-four School Heads returned the completed questionnaires for this evaluation. The breakdown was as follows: 12 urban, 9 model, and 33 rural. Table 24 is a summary of their perceptions towards the training.

TABLE 24
Comparative Participant Perceptions of In-Service
Programme: Heads of Urban, Model, and Rural Schools

HS = Satisfied	(U) = Urban schools
MS = Moderate Satisfaction	(M) = Model schools
LS = Low Satisfaction	(R) = Rural schools

DIMENSIONS		% HS 6-5	% MS 4-3	% LS 2-1	Mean
I. Achievement of Academic Knowledge and Technical Skills Dimension					
	(U)	91.7	7.3	1.0	5.5
	(M)	93.1	5.6	1.4	5.5
	(R)	86.0	12.5	1.5	5.3
II. The Job Performance Dimension					
	(U)	93.1	6.2	0.7	5.4
	(M)	96.3	3.7	0	5.6
	(R)	87.9	11.4	0.8	5.3
III. The Administrative Dimension					
	(U)	79.2	18.1	2.8	5.0
	(M)	94.4	5.6	0.0	5.4
	(R)	73.2	20.7	6.1	4.9
IV. The Collegial Dimension					
	(U)	89.6	8.3	2.1	5.3
	(M)	94.4	5.6	0.0	5.4
	(R)	81.8	15.2	3.0	5.1
V. The Recognition-Support Dimension					
	(U)	93.3	6.7	0.0	5.4
	(M)	88.9	11.1	0.0	5.5
	(R)	78.8	18.8	5.0	5.0
VI. The Personal Dimension					
	(U)	88.0	11.1	0.9	5.3
	(M)	97.5	1.2	1.2	5.6
	(R)	78.1	17.8	4.0	4.9
VII. The Economic Dimension					
	(U)	53.3	45.0	1.7	4.7
	(M)	68.9	22.2	8.9	5.0
	(R)	57.6	24.2	18.2	4.2

It is evident that the samples of urban (N=12) and model primary Heads (N=9) were both small. This reduces the level of confidence in the results.

However, what can be pointed out is that all the categories of Heads appeared highly satisfied with the achievement of knowledge and skills, the job-performance dimension, the administrative dimension, the collegial dimension, the recognition-support dimension, and the personal dimension. Both the urban and rural Heads showed slightly lower levels of satisfaction along the economic dimension than the Heads of model schools. The results also showed that Heads of model schools were almost always at the top of the 3. Similarly, the Heads of the rural schools were the lowest. It was pointed out in Chapter II of the study that rural primary schools in the country are generally poorer in the supply of resources than model and urban schools. The rural schools are poorly equipped with instructional materials, buildings and teaching staff (Heyneman, 1980; Cameron and Hurst, 1983). According to Lam, (1979) and Smylie (1988), these school properties have the potential to discourage the rural Heads from experiementing with innovative ideas acquired during their in-service training. This may help to explain why this group of Heads was the lowest of the 3 with respect to the assessment of the dimensions of satisfaction.

Perceptions of Heads of Large and Small Schools

Large primary schools were described as those schools with student enrollments of above 1000. This definition is acceptable to the Malawi Ministry of Education because they pay administrative allowances to those heading primary schools with student populations of over 1000. The schools with enrollments under 1000 were considered small schools.

Of the School Heads who responded to this investigation (N=54), 22 were Heads of large schools and 32 of small schools. Their feelings regarding the MIE-BU Teacher Programme as assessed by the survey questionnaire are portrayed in Table 25.

TABLE 25
Comparative Participant Perceptions of In-Service
Programme: Heads of Large and Small Schools

HS = High Satisfaction	(L) = Large schools		
MS = Moderate Satisfaction			
LS = Low Satisfaction	(S) = Small schools		

DIMENSIONS	% HS 6-5	% MS 4-3	% LS 2-1	Mean
I. Achievement of Academic Knowledge and Technical Skills Dimension				
(L)	91.5	6.8	1.7	5.3
(S)	86.3	12.5	1.2	5.3
II. The Job Performance Dimension				
(L)	92.0	7.6	0.4	5.4
(S)	89.3	9.9	0.8	5.3
III. The Administrative Dimension				
(L)	83.3	12.9	3.8	5.1
(S)	74.5	20.8	4.7	4.9
IV. The Collegial Dimension				
(L)	85.2	12.5	2.3	5.2
(S)	85.9	11.7	2.3	5.2
V. The Recognition-Support Dimension				
(L)	88.2	10.9	0.9	5.3
(S)	80.6	17.5	1.9	5.1
VI. The Personal Dimension				
(L)	83.3	12.6	4.0	5.2
(S)	83.7	14.2	2.1	5.1
VII. The Economic Dimension				
(L)	65.5	26.4	8.2	4.7
(S)	53.8	30.0	16.2	4.3

Both the large and small School Heads recognised the value
of the training with respect to the achievement dimension (91.5%
for large school Heads and 86.3% for small school Heads), the
job-performance dimension (92.0% for large school heads and
89.3% for small school Heads), the administrative dimension
(83.3% and 74.5%, respectively), the collegial dimension (85.2%
and 85.9%), the recognition-support dimension (88.2% and 80.6%),
and the personal dimension, (83.3% and 83.7%). These high rates
of assessment as well as agreement suggest how the Heads valued
the in-service programme especially with respect to these
dimensions of satisfaction. Again, this record of perceived
satisfaction is a reflection of the fact that the Heads had never
before been involved in in-service education experiences.

Table 25 also points out that both sets of School Heads
recorded low levels of satisfaction on the economic dimension
(65.5% for Heads of large schools, and 53.8% for Heads of small
schools). The reasons for this observation have already been
given in previous sections.

However, the two groups of Heads differed in their
assessments of their feelings of satisfaction along the
achievement dimension, the administrative dimension, the
recognition-support dimension, and the economic dimension. Heads
of the large schools (N=22) had 4 years of secondary education as
disclosed by the questionnaire survey data. By contrast, some of
the Heads of the small schools (N=7), had 2 years of secondary
education only. This figure seems rather low and this

investigator believes that there were more people among the category of the Heads of the small schools who had attained only 2 years of secondary education. Some people feel less comfortable when they are asked information regarding their educational achievements, especially in a country where opportunities for secondary education are very limited. It can therefore be speculated that the Heads of the small schools assessed the achievement dimension less positively than their colleagues in the large schools because some members of the group had lower entry qualifications to enable them to benefit greatly from the in-service programme. They were short of appropriate entry skills such as an adequate language facility to enable them to closely follow the instruction which was conducted in English. This might have accounted for the slightly lower level of satisfaction along the achievement dimension for this group of people since learning development is a process which builds upon already existing knowledge (Berman and Friederwitzer, 1981). If an individual does not have appropriate background information, he or she may not profit from instruction.

The 2 categories of Heads differed also in their evaluations of the administrative dimension. The large school Heads' assessment gave results of 83.3%, whereas their colleagues produced results of 74.5%. Large school enrollments suggest a situation of complex problems and the reverse is probably true also. By implication, Heads of large schools may be busily

involved in negotiating with students, staff, and the community on the best procedures for running the schools in order to realize educational goals. The results of such discussions may lead to the formulation of agreed school policies. These aspects were some of the variables of the administrative dimension which the research participants evaluated on a 6-point scale. The results of the large school Heads along the administrative dimension were an indication of acknowledgement of the usefulness of the programme in giving them appropriate administrative skills which they were able to apply in the work situation. This may have been the reason why the Heads of the large schools scored slightly higher along the dimension than their counterparts.

The recognition-support dimension was also a source of differences in perception among the Heads. The large school Heads indicated a slightly higher level of satisfaction (88.2%) than the small school Heads (80.6%). Since the Heads of the large schools serve a larger body of students and, by implication, a larger community, and also work with a large staff (over 20 as shown by questionnaire data), it may be that their participation in the MIE-BU Programme acted as a booster of their feelings of self-esteem and recognition. Hence, these Heads slightly surpassed their friends on the evaluation of this particular dimension of satisfaction.

Finally, the Heads differed also along the economic dimension: 65.5% and 53.8% for large and small school Heads, respectively. As previously stated, in Malawi the large primary

school Heads are paid an administrative allowance by the Ministry of Education, whereas the rest are not. This may help to explain why the Heads of large schools were slightly more positive with the rating of this dimension than the Heads of the small schools.

Perceptions of Male and Female Graduates

The 114 survey questionnaires that were received gave a breakdown of the sexes as follows: 95 male and 19 female. This represents a sex ratio of 5:1 which is far too unbalanced to enable any reasonable comparative interpretations of the evaluation findings, although it does reflect the composition of the Malawian teaching force. However, it is sufficient just to point out the trend of the findings as displayed in the following table.

TABLE 26
Comparative Participant Perceptions of In-Service
Programme: Male and Female Participants

HS	= High Satisfaction
MS	= Moderate Satisfaction
LS	= Low Satisfaction

(M) = Percentage of Males
(F) - Percentage of Females

D I M E N S I O N S		% HS 6-5	% MS 4-3	% LS 2-1	Mean
I. Achievement of Academic Knowledge and Technical Skills Dimension					
	(M)	89.8	9.0	1.2	5.4
	(F)	76.3	21.7	2.0	5.0
II. The Job Performance Dimension					
	(M)	89.0	9.8	1.2	5.4
	(F)	77.2	19.7	3.1	5.0
III. The Administrative Dimension					
	(M)	75.4	19.7	5.0	4.9
	(F)	69.3	28.9	1.8	4.8
IV. The Collegial Dimension					
	(M)	83.2	14.4	2.4	5.2
	(F)	81.6	17.1	1.3	5.1
V. The Recognition-Support Dimension					
	(M)	71.9	23.6	4.5	4.9
	(F)	67.4	26.3	6.3	4.6
VI. The Personal Dimension					
	(M)	81.8	15.1	3.1	5.2
	(F)	71.9	24.0	4.1	4.8
VII. The Economic Dimension					
	(M)	45.7	32.3	21.9	4.0
	(F)	45.3	31.6	23.2	4.0

The evaluations indicate that the male appeared more satisfied with the training on most dimensions than their female counterparts. This observation applies to the achievement dimension, the job performance dimension, the administrative dimension, the reognition-support dimension, and the personal dimension. It is difficult to comment on these observations because the female sample was small.

Interestingly, both sexes agreed in their degrees of satisfaction with regard to the assessment of the collegial dimension, and the economic dimension.

Perceptions of Older and Younger Participants

The retiring age for civil servants in Malawi (teachers included) fluctuates between 50 and 55 years of age. This is so in order to create employment opportunities for the rapidly increasing young population. Therefore, in the present research, an older participant was defined as one who had exceeded the age of 40 and anyone below that age level was considered younger.

Of the people who had answered the survey instrument (N=114), 61 were categorized as older graduates and 53 as younger graduates. The perceptions of these people in regard to the treatment that they received are exhibited in the table which follows.

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TABLE 27
Comparative participants' perceptions of satisfaction
with in-service programme: Older and younger graduates

	HS = High Satisfaction			O = Older graduates		
	MS = Moderate Satisfaction			Y = Younger graduates		
	LS = Low Satisfaction					
			% HS 6-5	% MS 4-3	% LS 2-1	Mean
D I M E N S I O N S						
1. Achievement of Knowledge and Skills		(O)	86.1	12.2	1.7	5.3
		(Y)	87.7	11.3	1.0	5.3
2. The Job Performance Dimension		(O)	85.8	12.2	2.0	5.2
		(Y)	87.3	11.9	0.8	5.3
3. The Administrative Dimension		(O)	73.1	20.9	6.0	4.8
		(Y)	74.9	22.6	2.5	4.9
4. The Collegial Dimension		(O)	80.9	15.8	3.3	5.0
		(Y)	84.0	15.0	1.0	5.2
5. The Recognition-Support Dimension		(O)	72.2	22.2	5.6	4.8
		(Y)	70.0	26.6	3.4	4.8
6. The Personal Dimension		(O)	78.5	17.1	3.4	5.0
		(Y)	81.1	16.9	2.0	5.1
7. The Economic Dimension		(O)	43.8	32.4	23.8	3.8
		(Y)	48.2	33.0	18.8	4.1

The evaluations featured that both the older and younger
trainees closely matched in their levels of satisfaction with the
training on all except 2 dimensions, namely, the collegial
dimension (older: 80.9% and younger: 84.0%), and the economic
dimension (older: 43.8% and younger 48.2%). However, the

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differences are small and may therefore be attributed to chance.

Graduates' Involvement in Operating In-service

The research subjects were asked to write down, on a 5-point scale, the number of times they conducted in-service education activities for the teachers in the schools. This was a very crucial question as it related to the thrust of the teacher project: to train a cadre of professionals who would in return train others on the job. Data analysis yielded the results in Table 28.

TABLE 28
Percent of graduates indicating conducting in-service activities for teaching staff during 1987-88 school year

Category	None	Once	Twice	Three Times	More Than Three Times
School Heads	13.0	22.2	35.2	14.8	14.8
School Inspectors	26.7	38.3	18.3	5.0	11.7
MEAN	19.85	30.25	26.75	9.90	13.25

The above results suggest that the graduates of the MIE-BU Teacher Project made some effort to conduct in-service activities for teaching staff in the school system. However, 13.0% of the Heads and 26.7% of the Inspectors who participated in this case study reported failure to organize in-service programmes for teachers in the schools. A number of reasons may be suggested

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for failing to operate in-services:

1.   It is possible that some of the graduates were not clear about what they were expected to do after their graduation. Lack of clarification of the ultimate goals of a staff development programme is often given as one of the barriers to the transfer of an innovation to the work site (Berman, 1981).

2.   Uncertainty of practice is also a possibility (Smylie, 1988). It is possible that some of the graduates did not develop the skills for planning and delivering in-service activities. Hence, it is possible that they lacked confidence in operating in-service for teachers in the schools.

3.   Negative social influences in the workplaces (Joyce and Showers, 1988) may block some partipants from trying to conduct in-service programmes. It should be understood that a school is a political system (Firestone and Herriott, 1981). Thus, there may be certain members of staff (informal social forces) who could be opposed to innovations. The existence of such informal forces would discourage some of the trainees from conducting in-service training programmes.

4.   Joyce and Showers (1988) point out that teachers fall into three classes with respect to their levels of activity. There are high-activity people who always try out something. Then, there are those who display a high degree of dependence on others. Their level of activity depends on who they are with. Then, there is a third category of teachers who are reluctant to implement change in schools. Thus, it is possible that those who

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failed to conduct in-service courses might belong to one of the last two categories.

5.   Leadership of the central district administration is also a possible reason. The in-service graduates are civil servants. In Malawi, Heads and Inspectors cannot organize in-service courses for teachers without the approval of the Ministry representatives at the central district administration. It is therefore possible that some of the trainees were not able to conduct such training programmes because of lack of support from the central district office.

6.   Finally, it is also possible that a lack of instructional resources, which is a general problem in the country, might have made it difficult for some of these people to attempt such training programmes.

The MIE-BU trainees were further asked to provide some examples of topics covered during the in-service courses they had organized for the schools. The purpose was to seek evidence that the graduates actually operated the programmes. Those who indicated they had performed the activity mentioned the following topics or areas:

1.   How to plan a lesson
2.   The importance of teaching aids
3.   Writing a test using a test plan
4.   Using the mean to assess pupils' work
5.   Class management, supervision, and administration
6.   Completing records of work
7.   Teaching of English grammar and oral English
8.   Teaching of Science
9.   The art of improvisation

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10. Effective teaching

The above topics fall into 3 general clusters, namely, planning for teaching, aspects of lesson delivery, and evaluation of the learning process. Thus, the topics that the participants covered during the in-service activities were of a practical nature. This is a reflection of what they were taught during the MIE-BU Programme. While a practical orientation to in-service training is a good idea, it can be argued that it would have been more appropriate to focus the staff development activities on, for example, some important perspectives of the learning process and child development before going into the specific areas. A perspectives approach not only improves a teacher's understanding of classroom instructional processes, but it also gives him or her a frame of reference for believing in what he or she does in the classroom.

RESULTS OF THE INTERVIEW SURVEY

The sample of the 8 teachers who were interviewed in Zomba Town during the month of August, 1988 came from the 6 districts of Malawi, namely: Blantyre, Dowa, Mchinji, Rumphi, Thyolo and Zomba. The interview conferences focused on the following questions:

1. What sort of things is your headmaster/mistress able to do now that s/he was not able to do before attending the course at Domasi?

2.   How often has s/he assisted you in professional duties?
     For example, how often has s/he assisted you in lesson
     preparation?

3.   How often has s/he observed you giving a lesson in
     class?

4.   How often has s/he conducted in-service courses for the
     school staff?

5.   In what manner are staff meetings conducted?

6.   How would you rate your school on the following scale:
     excellent, good, fair, poor and extremely poor, with
     respect to:

     (a)   Headmaster/mistress-staff relations
     (b)   Teacher-teacher relations
     (c)   Teacher-student relations
     (d)   Headmaster/mistress-student relations
     (e)   School-community relations

7.   How has the staff benefited from the Head's training?

8.   Is there anything which has not been covered that you
     wish to mention?

The 8 questions were asked to seek evidence to support or
contradict the information disclosed through the questionnaire
survey. For example, the first 4 questions searched for facts
regarding the Head's involvement in such activities as staff
supervision and development. The latter is the ultimate goal of
the MIE-BU Teacher Project. Questions 5 and 6 were addressed to
evaluate the degree of inter-personal relationships in the
schools headed by the programme participants. However, the above
interview schedule has two important limitations. First, there
is no standard for comparison to assure that the trained Heads
actually improved their practices, attitudes and values in the
schools as a result of the training. In other words, it would

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have been better if there was a pre/post-test interview. Second,

is the point that all of the questions above are more directive.

It would have been more appropriate if questions were more

indirect. The results of the interviews are given below.

TABLE 29
A summary of the results of interviews with a sample of
primary school teachers

Heads' activities reflecting changed behaviour	Frequency
1. Operation of in-service programmes for staff	2
2. Supervision of teachers	2
3. Implementation of effective school administrative, organizational and management practices. Examples: increased division of labour, improved Head-Staff relations, and improved staff meetings	2
4. Re-organization of procedures of preparing schemes of work and lesson plans.	2
Specification of objectives and teaching procedures when preparing a lesson plan.	2
5. None	2

Frequency and type of professional assistance given by Head	
1. Once: lesson organization and planning	6
2. Once: approaches to English language lessons	1
3. Once: class organization and managment	1
4. None	1

Number of times of lesson observations by Head	
1. Once	4
2. Twice	1
3. Never	3

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TABLE 29 (continued)

Number of times Head conducted in-service
for staff

1. Once conducted a week-long in-service on addition,
   multiplication, and addition. Head also organized
   a seminar for 5 other schools in the neighbourhood   1
2. Twice on the following themes: preparation of
   schemes of work, and lesson plans, test preparation,
   and the teaching of arithmetic   4
3. Three times on school management and methods of
   teaching   1
4. None   2

Conduct of staff meetings in the schools

   Open discussions at staff meetings   8

Evaluation of inter-relations in school

(E=excellent; G=good; F=fair; P=poor and EP=extremely poor)

		E	G	F	P	EP
		%	%	%	%	%
1.	Head-staff relations	25.0	25.0	50.0	0.0	0.0
2.	Teacher-teacher relations	0.0	87.5	12.5	0.0	0.0
3.	Teacher-student relations	0.0	100.0	0.0	0.0	0.0
4.	Head-student relations	12.5	75.0	12.5	0.0	0.0
5.	School-community relations	0.0	75.0	25.0	0.0	0.0

Perceived benefits resulting from Head's Training

1. Improved Staff-Head relations   1
2. Improved record-keeping   1
3. Improved classroom organization skills   2
4. Increased resourcefulness   1
5. Increased interest in reading and study   1
6. Improved co-operation among teachers   1
7. Increased teacher involvement in school
   administration   1
8. Improved lesson preparation and testing
   skills   7
9. None due to lack of supervison and
   in-service activities   1

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TABLE 29 (continued)

Other Remarks

Follow-ups would help to remind the Heads of the
importance of practising the skills they developed
at Domasi   1

The above findings reflect the opinions of only the 8
teachers who were contacted. Therefore, they are less useful in
making practical interpretations. But it is important to
highlight the trends they seem to indicate:

1. There is greater interest in staff development
activities. The interview data show that the School Heads had
involved their teachers in in-service activities focused on the
teaching of arithmetic, preparation of teaching plans such as
schemes of work and lesson plans, test preparation, classroom
management skills, and general teaching methods. The data
further emphasize that the Heads had been involved in the
supervision of instruction in the schools. For example, the
Heads provided teachers with professional assistance in lesson
planning and organization (including the specification of
objectives), and approaches to the teaching of English language
lessons. Additionally, they also observed lessons given by their
school staff. These practical activities are nutrients for staff
growth (Hunter, 1988) and have the potential to improve learning
in the Malawian primary schools.

2.   There is evidence for improved skills in the areas of school administration, organization, and management. The teachers who were interviewed reported that there was increased division of labour in their schools which implies teacher involvement in school administration, organization, and management. It is reasonable to assume that this trend can lead teachers to develop a sense of ownership of a school. The latter can affect school improvement since a sense of ownership implies that school staff share a common understanding of a school's mission (Griffin, 1987). Thus, all teachers at a school cooperatively work toward common school goals.

The above table also reports improved procedures for school staff meetings. School staff meetings were reported as being more "open" implying that the Heads encouraged teacher participation in decision-making during the meetings. This trend is a positive gain of the MIE-BU Teacher Project. Staff meetings of this type help to improve relationships among staff. It is, therefore, not surprising that the interviewees also reported significant improvement in school-site inter-relationships. Improved relationships at the local school site are a necessary pre-condition for school improvement (Joyce and Showers, 1988). Improved relations imply that the school teacher group becomes cohesive (Griffin, 1987) and members of staff are then forced to share common values regarding the purposes of schooling. Other things being equal, shared values of the goals of schooling can have an influence upon school improvement.

To summarize, the interview results show "trickle down" effects of what was covered by the graduates during their attendance of the in-service programme at Domasi.

SUPPLEMENTARY QUESTIONNAIRE ANALYSES

In addition to the closed-ended items, the survey questionnaire also accommodated open-ended forms of responses. For example, at the end of each of the 7 dimensions, there was an "other" category. This was done in order to obtain additional data which the researcher might not have addressed at the time of instrument development.

1.   The open-ended responses were grouped into categories, in which similar responses were totalled.

2.   Obviously this was only an approximate process, due to inherent difficulties in interpreting responses and of trying to decide what respondents really meant.

3.   Nonetheless, most of the responses were fairly clear and straight forward.

4.   Certain common themes emerged as exhibited in Tables 30 and 31 that follow.

TABLE 30
Analyses of Questionnaire Open-ended Responses:
Heads of Schools

I.   ACHIEVEMENT OF KNOWLEDGE DIMENSION   FREQUENCY
      Themes
      1.   Feelings of improved personal competence
           at work   23
      2.   Improved abilities in working with staff   30
      3.   Problems of implementation (overload and
           transfers)   6

II.   THE JOB-PERFORMANCE DIMENSION
      Themes
      1.   Improved relationships in the work setting   32
      2.   Increased confidence   19
      3.   Improved skills in the performance of in-service   14
      4.   Greater improvement in staff performance   7
      5.   Feelings of improved performance   35

III. THE ADMINISTRATIVE DIMENSION
      Themes
      1.   Greater involvement in administration   20
      2.   Satisfactory work relations with staff   17
      3.   Increased feelings of administrative competence   5
      4.   Feelings of unsatisfactory work relations with
           supervisors   10

IV.   THE COLLEGIAL DIMENSION
      Themes
      1.   Improved relations in working with teachers   19

V.   RECOGNITION-SUPPORT DIMENSION
      Themes
      1.   Lack of support from authorities   9

VI.   THE PERSONAL DIMENSION
      Themes
      1.   Enhanced feelings of personal growth   27
      2.   Increased desire for advanced training   16

VII. THE ECONOMIC DIMENSION
      Theme

      1.   Absence of a reward support system   29

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TABLE 30 (continued)

VIII. THE GENERAL REMARKS' DIMENSION
    Themes

1.	Greater recognition of training programme	20
2.	Absence of a reward support system	10
3.	Need for follow-up	6
4.	Need for advanced training	6

N=54

It should be emphasized that the frequencies in the above table do not tally with the actual number of Heads (N=54) who responded to the questionnaire survey. The reason is, some of the research informants did not react to the open-ended questionnaire responses. Nevertheless, several themes emerged overwhelmingly:

1.   Increased Feelings of Personal Competence

The Heads repeatedly emphasized that the training programme had assisted them in improving their competence at work, defined as improved teaching skills (planning, communication, and evaluation), improved skills in instructional supervision, and improved administrative/management skills. This represents growth in professional skills. These positive feelings of competence also contributed to their feelings of confidence in discharging their duties and functions. A high level of feelings of confidence is most closely associated with certainty of practice (Smylie, 1988):

.   Before I attended the programme, I feared the headship
     position or responsibility because I didn't know how to
     go about doing it. Now, I do it well.

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.   I am at present more confident of what I do and my
        members of staff are given opportunities to participate
        in most activities at school.

2.   Improved Work Relationships

The above data provide evidence that relationships in the
workplaces had improved. This implies increased collegiality
among staff in the schools which, in turn, can affect school
improvement, as already discussed in previous sections of the
present chapter. These two statements support the view that work
relationships have improved in those schools headed by the
trained Heads:

.   I am now better able to communicate with the teachers
        and have developed a democratic style of decision-
        making.

.   This time, I understand that working as a team is the
        only way to raise performance, unlike in those days
        when I took leadership to mean dictating my staff.

3.   Improved Skills in In-Service Performance

One of the goals of the MIE-BU Teacher Programme is to train
a cadre of professionals who would, in return, train others in
the Malawi primary school system. The results in table 30 above
provide evidence that this intention is being attained. For
example, the School Heads who responded to the questionnaire
reported that their in-service skills had considerably improved
and that they were involved in the operation of school-focused
in-services for their teaching staff:

.   I now feel confident to conduct in-service courses for
        the staff at my school. In effect, I have so far
        conducted two in-service courses - one on the teaching

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of arithmetic (addition), and the other on how to
produce an examination scheme.

4.   Greater Involvement in School Administration

The Heads also acknowledged that the training programme
assisted them to broaden their horizons regarding school
administration.   As a result, they indicated greater involvement
in school administration which, in turn, has helped reduce
problems in some schools.

.   I remember some members of the community commenting
     that there are now fewer problems at the school because
     the man in authority has had training at Domasi.   He
     now knows how to handle the school better.

5.   Greater Desire for Advanced Training

One of the unintended effects of the training programme is
the creating of desire for continuing education.   About 16 Heads
reported interest for advanced training following their
participation in the programme. This is a logical observation
because training does create other interests and expectations in
trainees.

All the above gains caused the Headteachers to speak highly
in favour of the training they had received at the Institute of
Education at Domasi:

.   I find my job easier now because of the profitable
     course I attended at the Malawi Institute of Education,
     Domasi.

.   The leadership training programme should continue in
     order to improve the standards of education in Malawi.

.   The programme is an asset to whoever attended it.

Personally, I must assure you of the great importance
that I attach to the course. Not only has it improved
my professional abilities, but also my private life. I
can now mix freely with people with various
backgrounds.

However, some responses drew attention to lack of monetary
reward for personal advancement, and problems of horizontal
transfer of training to the work site. The more common examples
of such problems were overload, transfers, lack of support from
the central district administration (for example, lack of
material resources to enable Heads to operate effective in-
services) and lack of follow-up visits by change facilitators
(for example, MIE staff). It should be emphasized that there
were not many who voiced concern regarding problems of
implementing the innovative ideas developed during the programme.

Table 31 that follows presents a summary of the reactions of
the School Inspectors.

TABLE 31
Analyses of Questionnaire Open-ended Responses:
District School Inspectors

I. ACHIEVEMENT OF KNOWLEDGE	FREQUENCY
Themes	
1. Competence at work	35
2. Improved relations with teachers	9
3. Greater understanding of the learning process	4
4. Problems (limited academic coverage, and limited supervision due to long distances)	5
II. THE JOB-PERFORMANCE DIMENSION	
Themes	
1. Improved work relations with teachers	28
2. Improved abilities in conducting in-service	35
3. Relevance of programme to work	26
4. Lack of supervisor support	4

TABLE 31 (continued)

III. THE ADMINISTRATIVE DIMENSION
     Themes
     1. Increased administrative and organizational
         abilities   38
     2. Lack of administrative opportunities   12

IV. THE COLLEGIAL DIMENSION
     Theme
     1. Greater collegiality with teachers   34

V. THE RECOGNITION-SUPPORT DIMENSION
     Themes
     1. Lack of supervisor support   11
     2. Absence of a reward system   9

VI. THE PERSONAL DIMENSION
     Themes
     1. Improved performance   22
     2. Greater desire for learning   10
     3. Feelings of academic success   9

VII. THE ECONOMIC DIMENSION
     Theme
     1. Greater desire for a reward support system   36

VIII. THE GENERAL REMARK'S DIMENSION
     Themes
     1. Need for increased support services   21
     2. Usefulness of training programme   40

N=60

The themes obtained from the Inspectors' open responses were
in many ways similar to the Heads' themes. For example, the
Inspectors stressed:

1. Increased competence   in the operation of their duties and
functions, as supported by these statements:

.   My supervision is highly appreciated by both my fellow
    officers and teachers in the schools.

.   I rate myself as an effective supervisor in working
    with teachers in the school system.

.   I am more comfortable during inspection and
    supervision.

.   My personal professional performance has greatly
    improved because of the programme.

.   I am doing my job more effectively than before.

2.   Improved relations with teachers in the schools, as

evidenced here.

.   Before the programme started, I was viewed by teachers
    as a fault finder. But, now I am viewed differently.
    I am seen as an advisor, a guide, or a professional
    colleague by the teachers in the schools.

.   The relations with teachers and school agencies ...
    have improved

.   Some teachers write to us so we can pay them visits in
    their schools.

3.   Improved skills in performing in-service functions in

the schools, as shown below:

.   Now I conduct in-service courses for teachers in
    schools more effectively.

.   As a newly appointed Inspector, I had no idea regarding
    the delivery of in-services. but now I am able to
    plan, organize, and evaluate in-service programmes more
    easily.

4.   Increased administrative and organizational skills, as

supported by these statements:

.   The programme has equipped me with useful
    administrative, organizational and management skills
    which I use to settle problems whenever they erupt in
    schools.

.   I am able to plan and organize school displays more
    successfully following my studies at M.I.E.

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5.   Increased desire for advanced learning, as suggested
below:

.   I feel my interest for reading and study has increased
        because now, I use the library more often than I used
        to do before the in-service at Domasi.

The other benefit that the Inspectors recognized (although a
small number) was an increased understanding of the learning
process.   It   should   be   emphasized   that all the above aspects
suggest that the programme was relevant in meeting the
Inspectors' professional needs.   This reality moved the
Inspectors to rate the programme as being extremely useful in
helping improve the quality of learning in the schools.

However, a small number of Inspectors called attention to
such problems as: (a) limited supervision due to lack of support
from supervisors in providing them with transport, and (b) lack
of administrative opportunities, implying that their supervisors
did not involve them in administrative tasks.   But, a large
number of Inspectors expressed concern for the absence of salary
advancement following the programme they had attended:

.   The programme has been very useful to us in many
        aspects, but one wonders how the Ministry is looking at
        it. Most of us expected an incentive.

In addition to the information summarized in Tables 30 and
31, both sets of participants made the following suggestions for
action.

PARTICIPANTS' SUGGESTIONS FOR ACTION

1.   All the participants wanted   continued CIDA support for the programme so that their colleagues too could have their professional skills upgraded.

2.   They requested the Project Executives to persuade the Ministry of Education to re-evaluate the MIE-BU Award so that it could be recognized for the good of their salary advancement.

3.   The participants suggested implementation of follow-ups of the programme's ex-students.

4.   They also recommended that the District Educational Officers be considered for training of the same kind:

> The DEOs should go through the programme because they supervise us.   Why should they be ignorant of what is expected of us?

5.   The participants recommend that the Ministry of Education should plan effective strategies to ensure effective utilization of its trained personnel.

6.   They also emphasized coverage of more primary related content in future programmes.

7.   They recommended that the Institute of Education should consider establishing a postal book loan to enable the participants to borrow books from the MIE library.

CHAPTER VI

SUMMARY, CONCLUSIONS,
AND OPERATIONAL IMPLICATIONS

SUMMARY

Through the use of the mail questionnaire survey methodology, the research obtained data from 145 trainees who graduated from the MIE-BU Teacher In-service Programme in 1986 and 1987. The participants were School Heads and District Inspectors of Schools in Malawi. The primary purpose of the investigation was to evaluate the trainees' perceptions of satisfaction with the in-service programme they received. The construct "satisfaction" was defined as achievement of knowledge and skills, job-performance, acquisition of administrative skills, improved collegiality in the workplace, recognition-support, feelings of personal growth, and economic advancement. However, a further purpose of the research activity was to determine whether any selected biographical elements of the graduates were significant in influencing their perceptions of the programme. The scope of the research was defined within the framework of this set of questions:

1. (a) To what degree are the graduates satisfied with the in-service training programme that they received at the Malawi Institute of Education at Domasi?

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(b) What is the participants' ranking of satisfaction along the following dimensions? (i) Achievement of academic knowledge and technical skills; (ii) Job-performance; (iii) Administrative; (iv) Collegial; (v) Recognition-support; (vi) Personal; and (vii) Economic.

(c) For each dimension, which areas reveal a relatively high and low degree of satisfaction?

2. Are there any differences in levels of satisfaction between:

(a) The first graduates who completed the in-service training programme in 1986 and the second graduates who finished in 1987?

(b) Heads and Inspectors?

(c) Heads of urban, model, and rural schools?

(d) Heads of large schools and Heads of small schools?

(e) Male and female graduates?

(f) Older and Younger graduates?

3. To what extent are the graduates involved in operating in-service training programmes for the teachers in the school system?

However, it should be emphasized that, in addition to the questionnaire survey which the above questions imply, an interview schedule was also used in the study as explained in Chapter IV on Research Methodology. The analyses of both the questionnaire and interview survey data produced the following

results.

RATING OF PERCEPTIONS OF SATISFACTION WITH PROGRAMME

1.   Overall, 75.5% of the 114 subjects who responded to the questionnaire agreed that the in-service was highly satisfactory, and 19% indicated moderate satisfaction. Only 5.5% revealed low feelings of satisfaction with the training they received, according to the pre-determined indicators of satisfaction.

2.   The informants strongly agreed that the programme assisted them in (a) achieving knowledge and skills (87.0%); (b) performing their work effectively (86.5%), (c) promoting collegiality at the workplace (82.4%); (d) enhancing personal growth (79.8%); (e) improving their administrative skills (75.0%); and (f) achieving recognition-support (72.0%).

3.   A small number of people agreed that the programme helped them to achieve economic advancement (46.1%).

AREAS OF RELATIVELY HIGH AND LOW DEGREE OF SATISFACTION ALONG EACH DIMENSION

A.   Achievement Dimension

1.   The research participants strongly agreed that the MIE-BU programme helped them to gain knowledge and develop skills in the following aspects: learning progress (93.8%); supervision (93.7%); evaluation (91.9%); interpersonal relationships (89.7%); planning (88.8%); communication (87.7%); and staff development (87.2%).

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2.   Fewer people agreed that the programme was useful in covering academic content areas adequately (63.3%).

B.   The Job-Performance Dimension

1.   The School Heads and Inspectors revealed strong agreement that the in-service they attended was instrumental in increasing their confidence at work (95.7%); improving their evaluation skills (93.7%); increasing their abilities for improving teaching and learning performance in schools (93.0%); improving interpersonal communication skills (89.6%); improving interpersonal relationships with school staff (88.9%); increasing their creativity (86.9%); improving their skills in initiating and managing change (86.1%); improving their skills in negotiating with staff in decision-making (84.7%); improving their skills in operating staff development programmes (84.3%); improving their abilities in problem-solving (83.6%); and improving their skills in maintaining good relations with the community (80.3%).

2.   The participants' support for "improved relations with supervisors" was slightly less (71.6%).

C.   The Collegial Dimension

1.   The trainees acknowledged strongly that the programme greatly assisted them in improving working relations (88.1%); increasing their association with others in the teaching field (86.9%); and increasing their opportunity to socialize with other

professionals outside teaching (78.9%).

2.   There was a slightly reduced level of agreement regarding the element "increased colleagues' interest in my work" (75.8%).

D.   The Personal Dimension

1.   The in-service participants strongly supported that the programme enabled them to improve their problem-solving abilities (94.1%); their self-image (86.8%); their work-pace (86.0%); their skills in critical thought (85.1%; their reading and study interests (84.2%; their awareness of local conditions related to work (79.6%); their feelings of job-satisfaction (76.8%); and their feelings of enhanced professional autonomy (76.7%).

2.   There was reduced support for the variable "improved personal comfort" (49.2%).

E.   The Administrative Dimension

1.   Four elements of the administrative dimension were strongly supported by the respondents involved in the research. These were "increased ability in influencing subordinates" (92.0%); "increased involvement in job-related committees" (85.3%); "increased involvement in special duties or assignments" (78.9%); and "increased ability in dealing with the community" (75.9%).

2.   Support   for   the   following   elements   of   the administrative dimension was lower: "increased influence on supervisors" (59.6%), and "increased involvement in general policy making" (58.2%).

F.   The Recognition-Support Dimension

1.   The research data revealed that the MIE-BU graduates agreed strongly that the training programme did the following for them: increased their recognition by subordinates (85.3%); increased their recognition by other colleagues (77.7%; and increased their staff support (72.1%)

2.   The data also revealed that there was less agreement regarding increased recognition by supervisors" (64.8%), and "increased recognition by the community" (60.2%).

G.   The Economic Dimension

1.   The results emphasized that a lot of people did not agree with the elements of the economic dimension as suggested by the following ratings: "increased chances for advanced training" (56.2%);   "increased opportunity for occupational promotion" (50.5%); "increased level of job security" (48.9%); "increased opportunity for other civil service positions" (46.2%); and "increased opportunity for salary advancement" (28.8%).

PERCEPTIONS OF FIRST AND SECOND GRADUATES

Of the 114 research subjects who responded to the inquiry, 76 consisted of the first graduates, and the remaining 38 were the second graduates. The following observations were noted.

1.   Both sets of participants strongly supported the view that the in-service enabled them to make a lot of gains in the following areas: (a) achievement of knowledge and skills (87.7% for the first graduates, and 84.9% for the second graduates); (b) job performance (86.4% for the first graduates, and 86.0% for the second graduates; (c) administrative dimension (73.5% and 74.1% respectively); (d) collegial dimension (83.2% and 80.3%); (e) recognition-support dimension (69.5% and 72.6%; and (f) personal dimension (82.5% and 73.4%).

2.   Both the first and second graduates did not show strong agreement regarding the economic dimension (40.0% and 55.8%).

PERCEPTIONS OF SCHOOL HEADS AND INSPECTORS

Fifty-four School Heads and 60 Inspectors provided data for the research. The following reactions were noted.

1.   Both the Headteachers and Inspectors reported high agreement with the following dimensions of satisfaction: (a) achievement of knowledge and skills (88.4% for Heads and 85.6% for Inspectors); (b) job-performance (90.6%) for Heads and 82.5% for Inspectors); (c) administrative dimension (78.4% and 71.6% respectively); (d) collegial dimension (85.7% and 79.2%); (e)

recognition-support dimension (83.7% and 60.3%); and (f) personal dimension (83.7% and 75.9%). These high levels of agreement provided evidence that the programme was very useful to the participants. However, the Inspectors' rating of the recognition-support dimension was less than that of the Heads.

2. Both the Heads and Inspectors did not show strong agreement with respect to the economic dimension.

PERCEPTIONS OF HEADS OF URBAN, MODEL, AND RURAL SCHOOLS

The breakdown of the Heads who participated in the study was as follows: 12 urban, 9 model, and 33 rural. These totalled to 54.

1. All the three categories of Heads acknowledged with the view that the training programme was instrumental in enabling them: (a) achieve knowledge and skills (91.7% for urban, 93.1% for model, and 86.0% for rural); (b) improve their job-performance (93.1% for urban, 96.3% for model, and 87.9% for rural); (c) improve their administrative skills (79.2%, 94.4%, and 73.2%); (d) promote collegiality at school site (89.6%, 94.4%, and 81.8%); (e) increase their recognition-support (93.3%, 88.9% and 78.8%); and (f) promote their personal growth and development (88.0%, 97.5%, and 78.1%).

2. Further, the data indicated that the Heads of the model schools were always at the top of the three. Similarly, the Heads of the rural schools were the lowest.

3. All the three types of Heads did not show strong

support for the economic dimension (53.3% for urban, 68.9% for model, and 57.6% for rural).

PERCEPTIIONS OF HEADS OF LARGE AND SMALL SCHOOLS

Of the 54 Heads who made their contributions to this study, 22 were Heads of large schools and 32 of small schools. The following observations were noted.

1.   Both groups of School Heads reacted positively to these aspects: (a) achievement of knowledge and skills dimension (91.5% for Heads of large schools, and 86.3% for Heads of small schools); (b) job-performance dimension (92.0% and 89.3%); (c) administrative dimension (83.3% and 74.5%); (d) collegial dimension (85.2% and 85.9%); (e) recognition-support dimension (88.2% and 80.6%); (f) personal dimension (83.3% and 83.7%).

2.   Both types of Heads showed less support for the economic dimension (65.5% for Heads of large schools, and 53.8% for Heads of small schools).

PERCEPTIONS OF MALE AND FEMALE GRADUATES

There were 95 males and 19 females. This reflected the composition of the Malawian teaching force. However, the following trends were noted.

1.   Both male and female respondents indicated strong agreement with: (a) the achievement dimension (89.8% for males, and 76.3% for females); (b) the job-performance dimension (89.0%

and 77.2%); (c) the administrative dimension (75.4% and 69.3%); (d) the collegial dimension (83.2% and 81.6%); (e) the recognition-support dimension (71.9% and 67.4%); and (f) the personal dimension (81.8% and 71.9%).

2. Both indicated less support for the economic dimension (45.7% for males, and 45.3% for females). In other words, the programme did not assist them in personal economic advancement.

PERCEPTIONS OF OLDER AND YOUNGER GRADUATES

Sixty-one graduates were considered older persons and 53 as younger people. Their reactions were noted as follows.

1. Both the older and younger participants showed a high degree of agreement with the following questionnaire variables: (a) achievement of knowledge and skills (86.1% for older participants, and 87.7% for the younger clients); (b) job-performance dimension (85.8% and 87.3%); (c) administrative dimension (73.1% and 74.9%); (d) collegiality (80.9% and 84.0%); (e) recognition-support dimension (72.2% and 70.0%); and (f) personal dimension (78.5% and 81.1%).

2. Both indicated less support for the economic dimension (43.8% and 4.2%).

INVOLVEMENT IN OPERATING IN-SERVICE PROGRAMMES

The informants were further asked to indicate on a 5-point scale the number of times they were involved in the operation of in-service programmes in the school system. The following

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results were obtained.

1.   About 19.8% (mean) indicated they were not able to implement any in-services in the schools.

2.   About 30.3% showed that they planned and conducted such activities only once.

3.   About 26.8% revealed they operated in-service courses for teachers twice.

4.   About 9.9% assured the researcher that they planned and delivered in-service activities three times.

5.   About 13.3% revealed that they offered the in-service more than three times.

6.   When they were further asked to provide some examples of the topics they dealt with during such programmes, they indicated topics within the general areas of planning for teaching, aspects of lesson delivery, and evaluation of the learning process.

INTERVIEW SURVEY RESULTS

The purpose of the interviews was to seek further evidence regarding the performance of the Heads in the schools. Due to circumstances as explained in Chapter IV, only 8 primary teachers in different schools were interviewed. The trends of the results were as follows.

1.   There was evidence that the Heads were involved in professional development activities such as the operation of in-

service on a variety of primary school-related topics, supervision of the learning process, and the provision of professional assistance to the teachers.

2.   The procedure for conducting school staff meetings had changed considerably.   The teachers who were interviewed indicated that staff meetings were more democratic in approach than ever before.

3.   The teachers also reported that inter-relationships in their schools had greatly improved.

RESULTS OF QUESTIONNAIRE OPEN-ENDED RESPONSES

The questionnaire allowed space so that respondents would write in additional information which might not have been addressed by the investigator at the time of questionnaire development.   Following the classification of such information into themes, the following emerged overwhelmingly:

1.   Both the Inspectors and Heads of schools expressed repeatedly that the MIE-BU Teacher Project greatly assisted them in improving their competence at work.

2.   Both sets of participants acknowledged that the programme assisted them in improving their in-service skills.

3.   They, further, reported that their confidence was raised.

4.   The Inspectors reported that their administrative and organizational skills had greatly improved. On the other hand, the School Heads emphasized greater involvement in administrative

functions at school.

5.   There was also a great deal of evidence that relationships in the workplaces had significantly improved.

6.   Both indicated greater desire for advanced training as a result of their participation in the course.

7.   All the above observations moved them to talk highly of the importance of the programme that they received.

8.   Nevertheless, the participants also indicated problems of implementing the innovative ideas. However, the number of people who reported problems was small. But the following concerns were, nonetheless, voiced: over-load, teacher transfer, problems of travelling long distances for supervision, and lack of support from central district administration.

9.   Many participants voiced their concern over the monetary reward issue.

CONCLUSIONS

CONCLUSIONS

On the basis of the findings of this research, the following conclusions can be made:

1.   The 1986 and 1987 graduates of the Malawi Institute of Education - Brandon University Teacher Programme reported that they <u>were highly satisfied with the programme</u> that they received at Domasi, Malawi.

2.   The participants were most satisfied with all the pre-determined elements of satisfaction, except one - the economic dimension. The training programme assisted them in: <u>achieving knowledge and skills</u>, <u>enhancing their job-performance</u>, <u>further developing their administrative skills</u>, <u>promoting collegiality at the work site</u>, <u>enhancing their feelings of recognition</u>, and <u>promoting their personal growth</u>. But the <u>training did not assist them in economic advancement</u>.

3.   The clients were happy with all the sub-variables of satisfaction as contained in the measurement, except the following: <u>coverage of academic content</u> related to primary education in Malawi, <u>relations with their supervisors</u> in the school system, <u>their personal comfort</u>, <u>their level of involvement in general policy-making</u>, <u>relations with the community</u>, and <u>everything under the economic dimension</u>.

4.   There were no notable differences in levels of satisfaction between: (a) first and second graduates; (b) Heads and Inspectors; (c) Heads of urban, model, and rural; (d) Heads

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of large and small schools; (e) male and female graduates; (f) older and younger graduates. All emphasized gains from the programme with respect to the 6 dimensions of satisfaction already listed above. All stressed the opposite with respect to the economic dimension. Nonetheless, the latter may also be viewed as another important indicator of programme success.

5. There was evidence of horizontal transfer of innovative ideas to the home environment: involvement in practical in-service activities, supervision of the learning process, provision of professional assistance to teachers in the design of teaching plans, and operation of democratic school staff meetings. There was also evidence that there was increased collegiality among teachers, Heads, and Inspectors in the schools. These are the nutrients for successful school improvement. <u>Thus, it can be concluded that the goals of the MIE-BU Teacher Project are being attained in the Malawi primary education system</u>.

6. Further, it can also be concluded that the operation of the above teacher programme in Malawi is consistent with the research literature on in-service training. The research literature on staff development emphasizes consideration of four important elements when conducting staff training and development programmes: <u>context</u>, <u>assessment</u>, <u>content</u>, and <u>process</u>. Chapter II has revealed that the programme gives attention to all the four aspects.

OPERATIONAL IMPLICATIONS

OPERATIONAL IMPLICATIONS

As a result of the major findings and conclusions of this research, this investigator gives credit to the MIE-BU Teacher Project for a job well done. Nevertheless, the following recommendations can be made in order to strengthen the impact of the in-service training programme in Malawi.

1.   The research literature on evaluation in this study emphasizes that one of the practical purposes of an evaluative study of a programme is to provide valuable information to various categories of decision-makers (policy-makers, programme administrators, staff developers, and participants) so that they are able to use it in making important decisions that can contribute to further improvement of a particular programme. Therefore this investigator recommends that the suggestions that are to follow should be considered for incorporation into the in-service teacher project in Malawi so that the programme continues to have greater impact on the educational system of Malawi.

2.   The evaluation has revealed that the School Heads and Inspectors were very satisfied with all the dimensions that were examined in this research, except the economic advancement dimension. The participants had hoped that the training would assist them achieve economic advancement. Unfortunately, this has not been the case. Hence, they voiced concern over lack of it. On the basis of this finding, this researcher recommends that the Malawian Policy-makers should re-evaluate the MIE-BU

Award so that it is recognized as a Diploma. In doing so, the salaries of the clients will increase automatically. A lack of such recognition may block the transfer of training to the work site.

3.   The research also revealed that the participants, who provided information for the study, were not happy with the coverage of academic content related to primary education in Malawi. They wanted more breadth. Therefore, it is recommended that these people should be exposed to the study of as many primary subjects as possible. For example, they could study two subjects during each of the three sessions of their training. This would allow them to study six primary content areas by the time they completed the programme, as opposed to the study of only two subjects during the entire training cycle. It should be recognized that the participants of this programme are generalists, not specialists.

4.   It has also been observed that the programme participants voiced concern regarding their relations with their supervisors. They indicated that they did not receive support from the central district administrators on issues related to the implementation of the new ideas developed at Domasi. Obviously, this condition is a barrier to implementation of change. This author therefore recommends that the programme should make effort to hold meetings or seminars with the district administrators so that they could be explained about the mission of the training

programme. In effect, the district administrators should also be involved in the supervision of the trainees.

5. The research also revealed that the participants required supportive resource materials to work with in the schools. On the basis of this finding, it is recommended that funds be made available for the purchase of instructional support materials. The Malawi Institute of Education should also identify an appropriate strategy that would assist in speeding up the transportation of books to the schools so that the graduates can have an adequate supply of resources to work with.

6. Lack of follow-ups was frequently mentioned in this study. It is therefore recommended that follow-ups should be conducted as often as possible in order to improve the curriculum of the programme and to assist the graduates in their attempts to bring about change in the schools. One-day district or regional seminars should be planned and conducted with the graduates of the programme in order that the trainees can exchange experiences. It should be understood that staff development does not end with the training programme at Domasi. It is a continuous process which must be supported all the time in order to improve schools.

7. The study provided evidence that some of the graduates were not able to supervise their teachers in the school system because of high overload. In view of this finding, it is recommended that the responsibilities and functions of the trained Heads should be reviewed to enable them to deal with

aspects of staff professional development more effectively.

Further, the study also disclosed that some of the Inspectors and School Heads were not able to conduct in-service training for the teachers. It is possible that some of the clients failed to transfer the training because of lack of clarification of the expectations of the programme. It is therefore recommended that before the participants are enrolled in a particular session of the programme, they should undergo a preparation period. District or regional seminars should be conducted to prepare the "would be trainees" for entry into the programme. The reason is to clarify the goals of the programme. Similarly, at the end of each session and at the end of the period of training, such conferences should also be organized in order to explain clearly the mission of the project.

8.   The research literature on the transfer of innovations suggests that people fail to implement change because of lack of skills. Thus, it is possible that some of the graduates of the programme were not able to be innovative in their schools because of lack of skills. This evaluator therefore recommends that the teaching approaches of the programme should focus on theory, demonstration, practice, feedback, and coaching so that trainees are able to develop appropriate skills for school change. Further, this author recommends that staff developers involved in the MIE-BU Programme should read Joyce, B.R. and Showers, B. (1983): Power in Staff Development Through Research On Training,

Lehming, R. and Kane, M. (Eds.) (1981): <u>Improving Schools -</u>
<u>Using What We Know</u>, and Fullan, M. (1982): <u>The Meaning of</u>
<u>Educational Change</u>. These three books are extremely useful in
training and development.

9. As a result of the extensive research review undertaken
by this investigator in completing this study, the researcher
wishes to recommend that: (a) the course "In-service Education"
which is a component of the MIE-BU Programme should be revised so
that it can include the study of stages of concerns as suggested
by Hall and his associates. This should help clients develop a
psychological orientation about issues associated with the
implementation of innovations; (b) a link course focused on the
issue of "Implementation and Change" be created. These people
are being trained as change agents in the school system. It is
therefore reasonable that they are exposed to problems associated
with implementation and change. Unfortunately, this aspect is
often forgotten in change programmes.

FUTURE RESEARCH

The major aim of the study has been repeatedly stated as an
assessment of participants' feelings of satisfaction with the
MIE-BU In-service Teacher Project in Malawi. This author has
already acknowledged that such a purpose was also a further
limitation of the investigation since perceptions of satisfaction
may not be good indicators of programme success. In the light of
this limitation, the investigator recommends that future research

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directions should focus on:

1.   The impact of the programme on pupil learning
development at the school site.

2.   The effect of the project on the untrained teachers
participating in the school system.

3.   The factors that block the transfer of innovative ideas
to the work environment.

Further, this inquiry has reviewed different types of
research methodologies. It is therefore recommended that future
investigations   should   apply   other   types   of   evaluation
methodologies to obtain evaluative data.

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APPENDIX A

DEFINITIONS OF TERMS USED IN THE STUDY

The following terms, which are specific to the Malawian education system, have been used often in this study. Therefore, it is necessary to provide definitions of the terms.

Assisted Primary Schools: Malewezi (1988) describes assisted primary schools as those schools which receive financial support from the central government. Ownership of the assisted primary schools is in two parts: some are owned by the voluntary agencies such as missionaries, while others are owned by the local educational authorities. The local educational authorities own more schools than the voluntary agencies.

Curriculum: As used in this context, curriculum refers to specific content or subjects of study in the Malawi school system.

District: Malawi has three political administrative regions, namely, the Northern Region, the Central, and the Southern Region. Each region is further divided into political administrative areas known as districts. All together, there are 24 districts in the country.

Drop-outs: According to Loxley (1987) the term, drop-outs, refers to those students - "who leave school before the end of the final year of an educational cycle in which they are enrolled" (p. 63).

Experienced Head/Inspector: An experienced School Head/Inspector is one who has served in that position for a minimum of three years. This is the period of service required when the Ministry of Education and Culture advertises promotional posts for District Educational Officers, District Inspectors of Schools and Headteachers.

Form 1: Malawi's model of education is an 8 - 4 - 3/5 type. This means that students spend 8 years in primary education, 4 in secondary education, and then 3 to 5 years in the university, depending on their areas of study. The classes in the primary schools are referred to as standards, and those in the secondary as forms. At the end of 8 years of primary education, students write a public secondary school selection examination. The few

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students who are selected for secondary education enter Form 1 as their first secondary school class.

Inspector of Primary Schools: A school inspector is an education official charged with responsibilities of educational supervision at the district level and is referred to as District Inspector of Schools. There is also another type of inspector as well: the District Home Economics Organizer. The District Home Economics Organizer is charged primarily with the responsibility of supervising the delivery of home economics subjects such as needle-work and house-craft at district level. Thus, in the present study both the District Inspector of Schools and the District Home Economics Organizers are simply referred to as Primary School Inspectors.

Large Primary School: A large primary school is one with a student enrollment of over 1000 students. Any school under 1000 is considered a small school for questionnaire purposes.

Model Primary School: Model Primary Schools have been built in the country with assistance of external-donor agencies. One of their functions is to provide building standards to be followed by local communities when they wish to erect new school buildings. Model schools are well served with facilities and resources.

Older Participant: Since the retiring age for public servants in Malawi varies between 50 and 55, an older participant in this study is one who is above 40 years of age. Anyone below this age is considered younger.

Push-outs: Push-outs is a fairly new term in the educational literature. According to Kaluba (1986; p. 203):

> It has been found that in educational systems where allocation of a few available school places is by means of in-built screening and selection mechanisms, it is a misnomer to apply the term "drop-out" to pupils who are left out without places. The most suitable label should be push-out, because that is what the system does to them.

Repeater: According to Loxley (1987): "a repeater is a pupil who in a given school year, remains in the same grade as in the previous year . . ." (Loxley, 1987; p. 63).

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School Head: The term school head as used in the study refers to a primary school headmaster/headmistress in the context of Malawi or a principal in the context of Canada.

Unassisted Primary Schools: While the assisted primary schools receive funding from the central government, the unassisted schools do not receive any funding from the central government. Funding can only be provided to these schools when they meet the requirements prescribed by the Ministry of Education and Culture (Malewezi, 1988). When they do so, they become assisted primary schools.

Urban Primary School: For the purposes of the questionnaire survey, urban primary schools are those schools located in the cities and towns of Blantyre, Zomba, Lilongwe and Mzuzu. The rest of the schools are categorized as rural schools.

APPENDIX B

CANADIAN TEAM VISITS MALAWI

FOR A NEEDS ASSESSMENT

M A L A W I   I N S T I T U T E   O F   E D U C A T I O N

PROGRAMME OF THE VISIT OF DR. K. DANIELS, MR. C. CONNOR AND
MR. J. GOMAN FROM BRANDON UNIVERSITY, CANADA TO MALAWI FROM
19TH JUNE, 1983

Sunday, 19th June, 1983   -   1:39 p.m.

-    Arrive at Chileka Airport on Flight No. QM 376 and
     met by Messrs N.T. Kapermera, S.A. Hau and H.F. Gonthi.

-    Arrive at the Government Hostel.

Monday, 20th June, 1983   -   8:00 a.m.

-    Arrive at the Malawi Institute of Education and met by
     the Registrar and the Course Coordinator.

-    Tour of the Malawi Institute of Education with the
     Registrar and the Course Coordinator.

                    -    9:00-10:30 a.m.

-    Meeting with the Director to discuss Pre-assessment
     approach and instruments to be used.

-    Tea/Coffee with the Director.

                    -    10:45 - 12:00 noon

-    Meeting with the Professional Staff in the
     Conference Room.

                    -    12:00 - 1:45 p.m.

-    Lunch at the Government Hostel.

Monday 20,th June 1983   -   2:00 p.m.

    -      Arrive at the Institute and met by Mr. B.M. Ntandika

                    -      2:00 p.m. - 3:00 p.m.

    -      Meeting with Dr. H. Marchant, Messrs F.G. Mtunda,
           P.S. Mzumara and S.D.D. Safuli in the Conference Room.

    -      Tea/Coffee in the Conference Room

    -      Return to Government Hostel.

Tuesday, 21st June, 1983   -   8:00 a.m.

    -      Arrive at the Malawi Institute of Education and met by
           Mr. D.P. Chipeta.

                    -      8:00 a.m. - 10:30 a.m.

    -      Meeting with Messrs D.P. Chipeta, C. Lawrence and
           B.M. Ntandika in the Conference Room.

    -      Tea/Coffee in the Conference Room.

                    -      10:40 a.m. - 12:00 noon

    -      Meeting with Messrs S.A. Hau, W.E. Chauluka and
           P.S. Mzumara in the Conference Room.

                    -      12:00 noon - 1:45 p.m.

    -      Lunch at the Government Hostel.

                    -      2:00
    -      Arrive at the Malawi Institute of Education and met by
           Mr. N.T. Kaperemera.

                    -      2:00 p.m. - 5:00 p.m.

    -      Meeting with Dr. G.N. Sharma, Messrs N.T. Kaperemera
           and H.F. Gonthi in the Conference Room

    -      Tea/Coffee in the Conference Room.

-       Return to Government Hostel.

Wednesday, 22nd June 1983   -   8:00 a.m.
-       Arrive at the Malawi Institute of Education and met by
        Mr. W.E. Chauluka.

                                   -       8:00 a.m. - 10:00 a.m.

-       Meeting with the District Inspectors of Schools
        currently at the Malawi Institute of Education with the
        Course Coordinator, Mr. D.P. Chipeta and
        Mr. W.E. Chauluka.

-       Tea/Coffee in the Conference Room

                                   -       12:00 noon - 1:45 p.m.

-       Lunch at the Government Hostel.

                                   -       2:00 p.m.

-       Arrive at Chancellor College with Messrs F.G. Mtunda
        and S.D.D. Safuli

                                   -       2:00 p.m. - 2:45 p.m.
-       Courtesy call on the Principal, Chancellor College.

                                   -       2:45 p.m. - 5:00 p.m.

-       Meeting with Head of the Education Department, Dean of
        the Faculty of Education, Miss H. Meredith, Messrs
        F.G. Mtunda and S.D.D. Safuli.

-       Return to the Government Hostel.

Thursday, 23rd June, 1983   -   8:50 a.m.

-       Arrive at the Malawi Institute of Education and met by
        Mr. C. Lawrence and Mr. P.S. Mzumara.

Thursday, 23rd June, 1983   -   9:00 a.m.

- Meeting with the following Headmasters/Headmistresses
  of the following primary Schools with the professional
  staff of the Malawi Institute of Education in the
  Conference Room:-

- Headmaster   -   Bwaila P. School
         "   -   Chiluwe P. School
         "   -   Domasi Govt. P. School
         "   -   Likwenu P. School
         "   -   Malemia P. School
         "   -   Minama P. School
- Headmistress   -   Mponda P. School
- Headmaster   -   Namwera P. School
-        "   -   Songani P. School

- Headmistress   -   St. Joseph's P. School.

                              -    12:00 noon - 1:30 p.m.
- Lunch - Staff Common Room.

                              -    1:45 p.m.

- Arrive at Chancellor College with Mr. S.A. Hau
  and N.T. Kaperemera.

                              -    1:45 p.m.

- Meeting with Mr. A.E. Ashworth, S.A. Hau and
  N.T. Kaperemera.

                              -    3:30 p.m.

- Visit the A-V Center at Chancellor College with
  Dr. H. Marchant and Mr. S.D.D. Safuli.

- Return to the Government Hostel.

Friday, 24th June, 1983   -   8:00 a.m.

    -      Depart for Blantyre Teachers' College with
           Mr. B.M. Ntandika.
                                         -     9:30 a.m.

    -      Arrive at Blantyre Teachers' College and met by the
           Principal.

    -      Meeting with the Principal.

    -      Meeting with all Staff.

                                 -     12:00 noon - 1:15 p.m.

    -      Lunch at Shire Highlands Hotel.

                                         -     1:30 p.m.

    -      Arrive at the Regional Education Office.

    -      Meeting with the R.E.O.(S).

                                         -     2:00 p.m.

    -      Meeting with the District Inspectors of Schools
           (Blantyre Urban and Blantyre Rural) at the R.E.O.'s
           Office.

    -      Visit one or two Primary Schools in Blantyre.
           (R.E.O.(S) to arrange).

    -      Return to the Government Hostel, Zomba.

Saturday, 25th June 1983   -   10:00 a.m.

    -      Depart for KuChawe Inn with Mr. H.F. Gonthi and
           Mr. W.E. Chauluka.

    -      Visit the Zomba Plateau.

    -      Lunch at the KuChawe Inn.

    -      Visit the Plateau.

—   Return to the Government Hostel.

Sunday, 26th June, 1983   —   FREE

Monday, 27th June, 1983   —   8:00 a.m.

—   Arrive at the District Education Office, Zomba with
        Mr. P.S. Mzumara.

—   Courtesy calls on the D.E.Os Zomba Urban and Zomba
        Rural.

—   Meeting with the District Inspectors of Schools, Zomba
        Urban and Zomba Rural.

                                —   12:00 noon — 1:45 p.m.

—   Lunch at the Government Hostel.

                                —   2:00 p.m.

—   Arrive at Mponda P. School with Mr. P.S. Mzumara and
        met by the Headmistress

—   Visit the School.

—   Arrive at Bwaila P. School with Mr. P.S. Mzumara and
        met by the Headmaster.

—   Visit the School.

—   Arrive at St. Joseph's P. School with Mr. P.S. Mzumara
        and met by the Headmaster.

—   Visit the School

—   Return to the Government Hostel.

Tuesday, 28th June, 1983   -   8:00 a.m.

    -      Depart for Lilongwe with Mr. N.T. Kaperemera.

    -      Arrive at Capital Hotel.
                              -      12:00 noon - 1:45 p.m.
    -      Lunch - Capital Hotel

Tuesday, 28th June, 1983   -   2:00 p.m.

    -      Courtesy call and meeting with the Principal Secretary,
           Ministry of Education and Culture.

    -      Meeting with the Chief Inspector of Schools, Inspectors
           and others.

    -      Return to Capital Hotel.

Wednesday, 29th June 1983   -   8:00 a.m.

    -      Arrive at Lilongwe Teachers' College with Mr. N.T.
           Kaperemera and met by the Principal.

    -      Meeting with Principal, Lilongwe Teachers' College.

    -      Meeting with Staff.
                              -      12:00 noon - 1:45 p.m.

    -      Lunch at Capital Hotel.
                              -      2:00 p.m.

    -      Arrive at Regional Education Officer's Office.

    -      Meeting with the R.E.O. (C).

    -      Meeting with District Inspectors of Schools (Lilongwe
           Urban and Lilongwe Rural) at the R.E.O.'s office.

    -      Return to the Capital Hotel.

Thursday, 30th June 1983   -   8:00 a.m.

    -      Arrive at the Ministry of Education and Culture
           Headquarters with Mr. N.T. Kaperemera.

- Further meetings with the Chief Inspector of Schools, Inspectors, and others.

                                -    12:00 noon - 1:45 p.m.

- Lunch at the Capital Hotel

Thursday, 30th June, 1983   -   2:00 p.m.

- Arrive at the R.O.E.'s Office (C).

- Visit of some Primary Schools in Lilongwe Urban and Lilongwe Rural - R.O.E. (C) to arrange the Schools to be visited.

- Return to Capital Hotel.

Friday, 1st July, 1983   -   8:55 a.m.

- Arrive at the Ministry of Education and Culture Headquarters

                                -    9:00 a.m.

- Final Briefing Meeting with the Principal Secretary, Chief Inspector of Schools, Inspectors and others.

                                -    12:00 noon - 1:45 p.m.

- Lunch at Capital Hotel

- Depart for Government Hostel, Zomba.

Saturday, 2nd July 1983   -   8:00 a.m.

- Arrive at the Institute and met by Mr. B.M. Ntandika.

                                -    8:00 a.m. - 10:00 a.m.

- Meeting between Mr. J. Goman and Dr. G.N. Sharma, Messrs N.T. Kaperemera and H.F. Gonthi.

- Meeting between Mr. C. Connor and Messrs. D.P. Chipeta and B.M. Ntandika.

-      8:00 a.m. - 10:00 a.m.

-    Meeting between Mr. K. Daniels and Messrs F.G. Mtunda
     and S.D.D. Safuli.

-    Tea Break.

Saturday, 2nd July, 1983   -   10:15 a.m. - 12:00 noon

-    Meeting between Mr. J. Goman and Messrs C. Lawrence and
     B.M. Ntandika.
                                      -      10:15 a.m. - 12:00 noon

-    Meeting between Dr. K. Daniels and Mr. D.P. Chipeta.

                                      -      10:15 a.m. - 12:00 noon

-    Meeting between Mr. C. Connor and Mr. S.D.D. Safuli.

                                      -      12:00 noon - 2:00 p.m.

-    Lunch at the Government Hostel.

                                      -      2:00 p.m. - 6:00 p.m.

-    Free

Monday, 4th July 1983   -   8:00 a.m.

-    Arrive at the Malawi Institute of Education and met by
     Mr. S.A. Hau.
                                      -      8:00 a.m. - 10:00 a.m.

-    Meeting between Mr. J. Goman and Mr. S.A. Hau.

-    Meeting between Mr. C. Connor and Dr. H. Marchant,
     Messrs. F.G. Mtunda and S.D.D. Safuli.

-    Meeting between Mr. K. Daniels and Mesrs D.P. Chipeta
     and B.M. Ntandika.

-    Tea Break.

-      10:15 a.m. - 12:00 noon

    -      Meeting between Mr. C. Connor and Messrs P.S. Mzumara,
           N.T. Kaperemera and B.M. Ntandika.

    -      Meeting between Dr. K. Daniels and Dr. H. Marchant,
           Messrs. F.G. Mtunda and S.D.D. Safuli.

    -      Meeting between Mr. J. Goman and Mr. C. Lawrence and
           Mr. D.P. Chipeta.

Monday, 4th July 1983   -   12:00 noon - 1:15 p.m.

    -      Lunch - Staff Common Room.

                                        -      1:30 p.m.

    -      Depart for Chiluwe Primary School with
           Mr. P.S. Mzumara.

    -      Visit Chiluwe Primary School.
    -      Visit Songani Primary School.
    -      Visit Minama Primary School.
    -      Return to Government Hostel, Zomba.

Friday, 8th July 1983
    -      Programme to be arranged.

APPENDIX C

A SAMPLE OF THE MIE-BU COURSE STRUCTURE

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C O U R S E    S T R U C T U R E
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COURSE TITLE: Curriculum Studies in Arithmetic

TIME ALLOCATION: 40 Contact Hours

General Objectives

The course is intended to help course participants to:

-    improve their understanding of the objectives of Malawi
     Primary school Arithmetic.

-    improve their understanding of selected topics in Primary
     School Arithmetic.

-    improve their knowledge of the various methods of teaching
     Primary School Arithmetic.

-    understand the process of instructional materials
     development in Arithmetic.

Specific Objectives

By the end of the course participants will:

-    prepare a schematic diagram illustrating the scope and
     sequence of the Malawi Primary Arithmetic Syllabus.

-    examine the objectives, scope, and sequence of the Malawi
     Primary School Arithmetic Syllabus.

-    work out the congruency of an articulated scope and sequence
     with a Primary School Arithmetic textbook.

-    analyze the quality of the primary school arithmetic
     textbooks currently in use.

- discuss the advantages and disadvantages of developing thought processing in respect of arithmetic teaching.

- explain the importance of organization in the teaching of specific arithmetic content.

- design and justify a set of criteria for a good primary arithmetic program.

- demonstrate the ability to use a minimum of 12 different techniques in problem solving.

- demonstrate the newly acquired skills in a mini-lesson that is analyzed by using the microteaching technique.

- design, develop and produce appropriate instructional materials.

Course Content

1. Malawi Primary School Arithmetic Syllabus and Textbooks.

    - Goals and Objectives of Malawi Primary School Arithmetic.

    - Scope and Sequence of the Malawi Primary School Arithmetic Syllabus.

    - Quality of the Malawi Primary School Arithmetic textbooks.

2. Learning Theories applied in Arithmetic Teaching

    - Behaviourally Oriented Theory
    - Cognitively Oriented Theory
    - Sociologically Oriented Theory

3. Selected Topics

    -   Number work.
    -   The four rules.
    -   Place-value
    -   Problem Solving
    -   Rate, Ratio and Proportion.
    -   Graphical representation

4. Strategies in Teaching Arithmetic

    -   Class discussion
    -   Formal demonstration
    -   Guided discovery .
    -   Group/pair work
    -   Drill

5. Instructional Materials

    -   Design, development, and production
    -   Evaluation.

Teaching Strategies

The teaching strategies will include:

    -   Lectures
    -   Demonstrations
    -   Microteaching
    -   Class discussions
    -   Participant's worksheets

Assignments

    Residential
    -   Read selected parts of the textbook.
    -   Write responses for selected textbook questions.
    -   Write an instructional unit.

Field

The participants will submit to the institute details of a
teaching/learning aid which he designed for a topic in
Arithmetic.

Assessment

Quizzes	20%
Tests	30%
Participation	10%
Class Assignments	20%
Field Assignments	20%

Textbooks

Heddens, J.W.: **Today's Mathematics, Fifth Edition.**
Chicago. Illinois: Science Research Associates, Inc., 1984

References

Ashlock, R.B. et al.: **Guiding Each Child's Learning of
Mathematics**, Columbus, Ohio: Charles E. Merrill Publishing
Company, 1983

Ministry of Education and Culture.: **New Arithmetic Pupils'
Books 1 to 8**, Dzuka Publishing Company.

APPENDIX D

A SAMPLE OF AN INSTRUMENT USED
IN ASSESSING RESIDENTIAL PROGRAMMES
AT MIE

ASSESSMENT OF THE 1985 RESIDENTIAL PROGRAMME

M.I.E.-B.U. IN-SERVICE TEACHER EDUCATION PROJECT 1985 PROGRAMME
EVALUATION FORM

Check One: HM   _____   Year I _____   Year II _____
               DIS   _____
               DHEO _____
               RHEO _____
               AREO _____

1. For each course you have enrolled in rate its usefulness to
    your work on a scale of 1 - 5, whereby 1 represents least
    useful and 5 is most useful, by circling the appropriate
    number.

    (a) Study Skills
         1   2   3   4   5

    (b) Educational Administration
         1   2   3   4   5

    (c) Educational Psychology
         1   2   3   4   5

    (d) Agriculture
         1   2   3   4   5

    (e) Chichewa
         1   2   3   4   5

    (f) English
         1   2   3   4   5

    (g) Science and Health Education
         1   2   3   4   5

    (h) Arithmetic
         1   2   3   4   5

    (i) Civics
         1   2   3   4   5

(j)   History
      1   2   3   4   5

(k)   Geography
      1   2   3   4   5

(l)   Audio-Visual Education
      1   2   3   4   5

(m)   Trends in Primary Education
      1   2   3   4   5

(n)   Inspection and Supervision
      1   2   3   4   5

2.   For each course studied indicate its level of difficulty on
      a scale of 1 - 3 whereby 1 represents easy, 2 is average,
      and 3 is most difficult by circling the appropriate number.

(a)   Study Skills
      1   2   3

(b)   Educational Administration
      1   2   3

(c)   Educational Psychology
      1   2   3

(d)   Agriculture
      1   2   3

(e)   Chichewa
      1   2   3

(f)   English
      1   2   3

(g)   Science and Health Education
      1   2   3

(h)   Arithmetic
      1   2   3

(i)   Civics
      1   2   3

(j)   History
      1   2   3

(k)   Geography
      1   2   3

(l)   Audio-Visual Education
      1   2   3

(m)   Trends in Primary Education
      1   2   3

(n)   Inspection and Supervision
      1   2   3

3.   Each course has been allocated either 20 or 40 contact
     hours. For each course you have enrolled in do you feel
     this time allocation has been satisfactory. Place a tick
     (   ) in the appropriate space.

     {Yes _____ or No _____}

     (a)   Study Skills (20)   Y _____   No _____
     (b)   Administration (20)   Y _____   No _____
     (c)   Psychology (40)   Y _____   No _____
     (d)   Agriculture (40)   Y _____   No _____
     (e)   Chichewa (40   Y _____   No _____
     (f)   English (40)   Y _____   No _____
     (g)   Science (40)   Y _____   No _____
     (h)   Arithmetic (40)   Y _____   No _____
     (i)   Civics (20   Y _____   No _____
     (j)   History (20)   Y _____   No _____
     (k)   Geography (40)   Y _____   No _____
     (l)   Audio-Visual Education (20)   Y _____   No _____
     (m)   Trends in Primary Education (20)   Y _____   No _____
     (n)   Inspection and Supervision (20)   Y _____   No _____

4. A variety of teaching strategies was used in delivering courses. These included:

lectures
discussions
role-playing and simulation exercises
practical work
workshops
film-viewing
reading assignments
self-instructional materials
field trips (e.g. school visitations)
demonstrations

In the columns below list the strategies according to their effectiveness or ineffectiveness in presenting course material.

Effective Strategies	Ineffective Strategies
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

5. This in-service programme has been designed to improve the quality of educational administration, supervision, and instructional leadership in the school system. Rate the progress that has been made towards achieving this goal by placing a tick (   ) in the appropriate.

_____   _____   _____
Little progress   Some progress   Great progress

6. Indicate your impression of the programme and time-table.

    (a) The number of courses scheduled was:

    _____   _____   _____
         Too many   Satisfactory   Too few

    (b) The weekly time-table was:

    _____   _____   _____
         Too heavy   Satisfactory   Too light

    (c) The quality of the academic programme was:

    _____   _____   _____
         Poor   Satisfactory   Excellent

7. List general strengths of the programme.

    _____

    _____

    _____

    _____

    _____

8. List general weaknesses of the programme.

    _____

    _____

    _____

    _____

    _____

9. What suggestions do you have for improving the programme?

    _____

    _____

----

10. Indicate your level of satisfaction with each of the
     following extra-curricular activities and support services.
     On a scale of 1 - 3 whereby 1 represents dissatisfied, 2 is
     satisfied, and 3 is very satisfied, circle the appropriate
     number.

     (a) General administration of programme
          1   2   3

     (b) Boarding facilities
          1   2   3

     (c) Food
          1   2   3

     (d) Cafeteria services
          1   2   3

     (e) Library hours
          1   2   3

     (f) Use of senior common room
          1   2   3

     (g) Film shows
          1   2   3

     (h) Video shows
          1   2   3

     (i) Dance
          1   2   3

     (j) Educational tour
          1   2   3

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(k) Learning Society
         1   2   3

    (l) Sports/Games
         1   2   3

11. Additional comments on any aspect of the residential session
    will be appreciated.

Thank you for providing the professional staff with valuable
feedback.

APPENDIX E

RESEARCH INSTRUMENTS FOR THE EVALUATION

OF PARTICIPANTS' PERCEPTIONS OF SATISFACTION

WITH THE MIE-BU TEACHER PROJECT

EVALUATION QUESTIONNAIRE:

MALAWI INSTITUTE OF EDUCATION-BRANDON UNIVERSITY

LEADERSHIP TRAINING PROGRAMME

PART ONE

Directions: How would you assess your feelings of satisfaction or dissatisfaction with respect to the Leadership Training Programme which you attended at Domasi? Using the rating scale below, circle the appropriate number that best represents your feelings of satisfaction or dissatisfaction toward the item.

Scale definition:

1	= Disagree strongly	4	=	Tend to agree
2	= Disagree	5	=	Agree
3	= Tend to Disagree	6	=	Agree strongly

I. ACHIEVEMENT OF ACADEMIC KNOWLEDGE AND TECHNICAL SKILLS

I feel that the Programme has improved my knowledge and skills in:

1.	Academic content (teaching areas)	1 2 3 4 5 6
2.	Understanding the learning process	1 2 3 4 5 6
3.	Planning	1 2 3 4 5 6
4.	Staff development	1 2 3 4 5 6
5.	Evaluation	1 2 3 4 5 6
6.	Communication	1 2 3 4 5 6
7.	Interpersonal relationships	1 2 3 4 5 6
8.	Supervision	1 2 3 4 5 6

9. Give specific examples to indicate your satisfaction or dissatisfaction with some of the elements above.

_____

_____

_____

II.   THE JOB PERFORMANCE DIMENSION

I feel:

1.   My level of creativity at work has
     increased   1 2 3 4 5 6
2.   My relationship with staff has
     improved   1 2 3 4 5 6
3.   My relationship with my
     supervisor(s) has improved   1 2 3 4 5 6
4.   My confidence at work has increased   1 2 3 4 5 6

I feel that I am more effective in:

5.   Initiating and managing change
     at work   1 2 3 4 5 6
6.   Improving teaching and learning
     performance   1 2 3 4 5 6
7.   Interpersonal and communication
     skills   1 2 3 4 5 6
8.   Staff development   1 2 3 4 5 6
9.   Solving institutional problems   1 2 3 4 5 6
10. Evaluating teaching and learning   1 2 3 4 5 6
11. Encouraging staff participation
     in decision making   1 2 3 4 5 6
12. Promoting school-community relations 1 2 3 4 5 6
13. Give specific examples to show your satisfaction or
     dissatisfaction with some of the above elements.

     _____
     _____
     _____
     _____

III. THE ADMINISTRATIVE DIMENSION

I feel that the Leadership Programme has increased:

1.   My involvement in general policy
     making (e.g. Curriculum decision
     making)   1 2 3 4 5 6
2.   My ability to influence subordinates 1 2 3 4 5 6
3.   My ability to influence supervisors   1 2 3 4 5 6
4.   My involvement in special duties
     or assignments   1 2 3 4 5 6

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5. My effectiveness in dealing with
    the community   1 2 3 4 5 6
6. My involvement in job-related
    committees   1 2 3 4 5 6
7. Provide specific evidence to show your satisfaction or
    dissatisfaction with some of the above elements.

    _____
    _____
    _____

IV. THE COLLEGIAL DIMENSION

I feel that the Programme has:

1. Increased my ability to communicate
    with other professionals in the
    teaching field   1 2 3 4 5 6
2. Increased my opportunity to
    socialize with other professionals
    outside the teaching profession   1 2 3 4 5 6
3. Influenced colleagues to be
    interested in my work   1 2 3 4 5 6
4. Improved my working relations with
    colleagues   1 2 3 4 5 6
5. Give specific evidence to indicate your satisfaction or
    dissatisfaction with some of the above elements.

    _____
    _____
    _____

V. THE RECOGNITION-SUPPORT DIMENSION

I feel that:

1. My supervisors recognize my
    achievement   1 2 3 4 5 6
2. My subordinates recognize my
    achievement   1 2 3 4 5 6
3. Other colleagues recognize
    my achievement   1 2 3 4 5 6
4. The community recognizes my
    achievement   1 2 3 4 5 6
5. There is an increase in
    staff support   1 2 3 4 5 6

6. Give specific instances to indicate your satisfaction
    or dissatisfaction with some of the above elements.

    _____
    _____
    _____

VI. THE PERSONAL DIMENSION

I feel that the Programme has improved:

1. My awareness of local conditions
    related to work   1 2 3 4 5 6
2. My interest for reading and
    study   1 2 3 4 5 6
3. My power of argument and critical
    thought   1 2 3 4 5 6
4. My work pace   1 2 3 4 5 6
5. My problem solving abilities   1 2 3 4 5 6
6. My self image   1 2 3 4 5 6
7. My job satisfaction   1 2 3 4 5 6
8. My professional autonomy   1 2 3 4 5 6
9. My personal comfort   1 2 3 4 5 6
10. Give specific evidence to show your satisfaction or
    dissatisfaction with some of the elements above.

    _____
    _____
    _____

VII. THE ECONOMIC DIMENSION

I feel that the Leadership Training Programme has increased:

1. My opportunity for occupational
    promotion   1 2 3 4 5 6
2. My chances for advanced training   1 2 3 4 5 6
3. My opportunities for other civil
    service positions   1 2 3 4 5 6
4. My level of job security   1 2 3 4 5 6
5. My opportunity for salary advancement 1 2 3 4 5 6
6. Give specific examples to show your satisfaction or
    dissatisfaction with some of the above elements.

    _____
    _____
    _____

VIII. **OTHER:** Remark on any other aspects not covered.

_____
_____
_____

PART TWO

Directions: In the blank spaces provided against each item
               below, indicate the most appropriate answer using
               a check mark (X).

I. **PERSONAL FACTORS AND CHARACTERISTICS OF THE HEADMASTER/
    HEADMISTRESS**

   1.   Sex: Male/_____ /Female_____/
   2.   Age group: 25-30/_____/ 35-35/_____/35-40/_____
                     40-45/_____/ Over 45/_____/
   3.   Highest academic qual. (a) Sec:J.C./_____/
         MCE OR C.S.C./_____/
   4.   Experience as Headmaster/Headmistress: Less than
         5y/____/5-10y/_____/10-15y/_____/15-20y/_____/
         Over 20y/_____/
   5.   Teaching experience: Less than 5y/_____/ 5-10y/_____/
         15-20y/_____/Over 20y/_____/
   6.   What is your teaching load, in periods per week?
         Less than 10/_____/ 10-20/_____/ 20-30/_____/
         30-40/_____/ Over 40/_____/
   7.   How many in-service courses have you conducted for your
         staff this school year? None/_____/ One/_____/
         Two/_____/ Three/_____/ More than three/_____/
   8.   Give examples of topics covered during the in-service
         courses that you conducted. _____
         _____

   9.   How many staff meetings have you conducted this school
         year? Once per term/_____/ Twice per term/_____/ Three
         times per term/_____/
         More than three times per term /_____/
  10.   State the purposes of such meetings _____
         _____

II. SCHOOL FACTORS AND CHARACTERISTICS

1. Type of school: Urban/_____/ Model/_____/ Rural/_____/
2. Number of teachers at your school: 1-5/_____/
   5-10/_____ 10-15/_____/ 15-20/_____/ 20-25/_____/
   Over 25/_____/
3. Total number of pupils at school: Less than 400/_____/
   400-800/_____/ 800-1200/_____/ 1200-1600/_____/
   1600-2000/_____/ Over 2000/_____/
4. Average class size: Less than 20/_____/ 20-40/_____/
   40-60/_____/ 60-80/_____/ 80-100/_____/ Over 100/_____/

5. How many classes are located in rooms and how many in
   the open air? Room/_____/ Open air/_____/ (Please
   indicate number)
6. Rate the availability of teaching materials in your
   school using the following scale: 1 = Does not apply;
   2 = Not adequate; 3 = Needs improving; 4 = Adequate

Please circle the number that applies:

a)   Reference books or manuals   1 2 3 4
b)   Library resources   1 2 3 4
c)   Pupil books in Arithmetic   1 2 3 4
d)   Pupil books in English   1 2 3 4
e)   Pupil books in Chichewa   1 2 3 4
f)   Pupil books in Science & H. educ.   1 2 3 4
g)   Pupil books in Social Studies   1 2 3 4
h)   Notebooks   1 2 3 4
i)   Chalkboards   1 2 3 4
j)   Chalk   1 2 3 4
k)   Pictures and charts   1 2 3 4

APPENDIX F

A LETTER TO RESEARCH PARTICIPANTS

SOLICITING THEIR PARTICIPATION IN THE STUDY

Malawi Institute of Education
P.O. Box 50
Domasi

May 9, 1988

Dear Respondent:

   RE: RESEARCH QUESTIONNAIRE

   I am conducting a study regarding client or participant
satisfaction with the CIDA funded Brandon University - Malawi
Institute of Education Leadership Training Programme, which has
been in operation at Domasi since 1984.   This study is for my
thesis in partial fulfillment for the Degree of Master of
Education (Curriculum) at the University of Manitoba, Faculty of
Education.

   Your name has been selected because you participated in the
Leadership Training Programme.   However, please note that you are
not obliged to participate in this study and that you may very
well withdraw from the study at any time without prejudice.
Further, should you respond to the attached questionnaire, be
rest assured that you will not be personally identified when the
results of the study are reported.   It will be greatly
appreciated, if you could take the time to answer all the items
that appear in the questionnaire.

   Enclosed please find a stamped, self-addressed envelope for
the return of the completed questionnaire.

   Thank you for your attention in this matter.

                              Sincerely,

                              (Original Signed By)
                              Felix G. Mtunda

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