AN ASSESSMENT OF TEACHERS' PERFORMANCES IN CURRICULUM IMPLEMENTATION (ILLUBABOR SENIOR SECONDARY SCHOOLS IN FOCUS)

BY

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A THESIS

SUBMITTED IN (PART) FULFILLMENT FOR THE DEGREE
MASTERS OF ARTS IN EDUCATION IN THE
ADDIS ABABA UNIVERSITY

JUNE 1991

TITLE: AN ASSESSMENT OF TEACHERS' PERFORMANCES IN CURRICULUM IMPLEMENTATION (ILLUBABOR SENIOR SECONDARY SCHOOLS IN FOCUS)

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ACKNOWLEDGEMENTS

My deepest and heart felt gratitutde goes to Dr. Azeb Desta, Assciate Professor of Curriculum and Instruction in the Faculty of Education of Addis Ababa University, for her scholarly and genuine help in the process of carrying out and completing this thesis project. She is owed the unpayable debt that critical and constructive advisers should earn. Personal acknolwedgment is due to Ato Bizuayehu W/Yohannes, director of Mettu S.S.S., Ato Taye Aga, Assistant director of Bedelle S.S.S. and, Ato Mustefa Mohammed, Assistant director of Jimma, S.S.S. for their unreserved help in administering the questionnaire and arranging observation and interview schedules. W/t Fikirte Fekade has gained my gratitutde for the skillful and patient preparation of the manuscripts of this paper.

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ABSTRACT

In March/June 1990, a study was carried out in Illubabor Senior Secondary Schools to assess the performances of teachers of the academic subjects in curriculum implementation. The basic questions which the study attempted to answer were: (i) Do teachers select, structure, and reorganize the contents of the subjects they teach to facilitate the planning and execusion of instruction? (ii) Do all teachers employ appropriate methods, techniques, and proceures in teaching? (iii) Do teachers show an attempt to overcome the shortage of teaching-learning materials? (iv) Do teachers use community resources to the advantage of instruction? and (v) Do teachers provide for concerns of the learners?

One hundred thrity four teachers from a sample of three schools participated in the study. Through the use of questionaire, observations, and interviews, data were collected from teachers. Directors and students were also interviewed. The data collected were analyzed using percentages, averages, Chi-Square distribution, and interpretations in relation to literature in the field of curriculum and instruction. In particular, "Johnson's model of curriculum theory" was taken as a frame of reference.

Major findings of the study were (i) Teachers enhanced (selected, structured, and reorganized) the contents of the subjects they teach to facilitate the planning and execusion of instruction, (ii) Too many teachers were unconcerned about the shortage of instructional materials in the subjects they teach, (iii) Teachers tended to demonstrate a less frequent use of appropriate procedures and techniques in teaching and no significant difference was observed between all teachers in this regard, (iv) Few teachers used the community for much of their teaching, and (v) Teachers assisted the learners only through informal advice and encouragements.

On the basis of the findings it was recommended to (i) Organize workshops and seminars for teachers to help them master the methods and techniques of teaching, (ii) Advise teachers to produce their own teaching aids, (iii) Encourage teachers to use community resoruces, (iv) Mobilize the school and the surrounding community for the upkeeping and maintenance of the school, and (v) Make continious follow ups of teachers.

I. INTRODUCTION

1.1 The Problem

That teachers of all categories and levels have a major role in implementing the curriculum is a well established fact. More than ever, as Robert (1983), Wallin (1986), Johnson (1981), and many other educators have put it, teachers are engaged more and more today in the implementation of curriculum (instruction) with the use of new educational techniques and methods, taking advantage of modern educational devices or locally available resources. As convincingly put by Taba (1969), Hase (1971), Saylor (1966), and a host of other educational giants in the field of curriculum and instruction, teachers are educators and counsellors, who try to develop their pupils' abilities and interests and not merely to serve as sources of information and transmitors of knowledge. The teacher not only needs information to be shared with pupils, but he must also be competent enough to direct learners to the wide variety of sources they need to consult in their self-motivated learning enterprises.

Since the role of teachers is no longer limited to instruction only, teachers, apart from their instructional duties have now to assume more responsibilities, in collaboration with other educational agents in the community for the preparation of the young for community life, family life, productive activity, and so on. They should show more involvement in Co-curricular and out of school activities to the advantage of implementing the curriculum fully and attain the objectives

of schooling successfully. Furthermore, the effectiveness of curriculum implementation, among other things, depends largely upon the development of new relationships between the teachers and their pupils, who become more active partners in the instructional process, between the teachers and their colleagues and other agents who may be called upon to cooperate with them in the attainment of educational objectives.

On account of the above assertions, there is a general need for fresh national (regional) scrutiny, in a realistic manner, of teachers' performances as they relate to curriculum implementation.

Consequently, for the partial fulfillment of the course EdAd. 522, the writer undertook abaseline study regarding the role of teachers in curriculum implementation in the primary and secondary schools of Addis Ababa in June 1988*. The result of the study showed that the role of teachers in curriculum implementation was found to be ineffective due to their poor performances, that is, due to their failure in using appropriate principles, techniques and procedures, community resources, locally availabe materials, and etc. Though the study was a scratch work, it has created an intellectual curiosity to carryout a further investigation of teachers performances in curriculum implementation. In addition, a document from Higher

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*Hailu Dinka, (1988). Teachers' role in curriculum implementation in the primary and secondary schools of Addis Ababa. Addis Ababa University, (unpublished).

Education Commission shows that research relating to the performances of secondary school teachers is one of the research priority areas in Ethiopia at present,* and it is thus, expected that the result of this thesis project would come up with some professional profiles of teachers which, through further investigation at national level, could contribute to the training and utilization of teachers in this country.

The main purpose of this thesis project, therefore, was to assess the performances of teachers' as they relate to:

1. the planning, sequencing, and presentation of the curriculum content during the instruction process with the use of appropriate teaching procedures, principles, and techniques;
2. the production, preparation, and utilization of instructional aids;
3. the utilization of the human and material resources available within and outside the school;
4. teachers' concern for the learners; and
5. the staff-community relationships that exist to the advantage of implementing the curriculum.

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*Commission for Higher Education, (1987). "Sample Research Topics", Addis Ababa, (unpublished).

The following basic questions were raised and answered by the study:

a) Do teachers of the academic subjects enhance the curricular contents of their respective subjects (select, structure, and reorganize the concepts and basic ideas embeded in the contents) to facilitate the planning and execusion of instruction?

b) Do all teachers employ appropriate teaching procedures and techniques to facilitate instruction?

c) In the absence of adequate instructional materials and aids, how far do teachers of the academic subjects promote the acquisition of these materials to facilitate curriculum implementation in their respective subjects?

d) Do teachers show an effort in using community resources to the advantage of instruction?

e) How far do teachers provide for concerns of the learners?

1.2 Delimitation of The Study

The study was primarily concerned with the performances of senior secondary school teachers of the academic subjects in Illubabor administrative region. In particular, teachers' efforts in structuring the curriculum contents to facilitate instruction, their creative preparation and utilization of instructional media in teaching, their wise use and application

of appropriate teaching techniques, and their endeavours in making appropriate provisions for concerns of the learners were the focuses of this thesis project. Hence, the process aspect of instruction, that is, planning and execusion were the themes treated in this paper. Furthermore, teachers, directors and deputy directors, and students of governmental senior secondary schools (grades 9 to grade 12) were taken as the subjects of the study (See Appendix D).

1.3. Significance of The Study

It appears that research relating to the performance of senior secondary schools is inadequate currently as compared to the existing demands to improve instruction. Thus, the writer believed that this thesis project may create an awareness of the state of affaire regarding the performance of senior secondary school teachers. Furthermore, since this thesis project could serve as a baseline work for future indepth investigation at national level, it could bear a particular significance.

1.4. Methods, Procedures, and Sources of Date

The project was primarily concerned with a comprehensive assessment of teachers' performances rather than a deep investigation of a particular instructional problem in the region. Consequently, survey was the method employed. Illubabor

has been chosen (see Appendix A) on the basis of the reason that (1) such studies never concerned themselves much with regions in the remotest areas of the country and hence, (2) literature relating to curriculum implementation as pertaining to the performance of senior secondary school teachers of remotest regions like Illubabor seems to be inadequate, and (3) the writer knows the region since he was educated there.

Illubabor administrative region is situated in the southh western part of Ethiopia. Formerly, the region extended upto the Sudan border (including Gambella) but since the establishment of PDRE, Gambella became an administrative region by itself and the border of Illubabor extended a bit to the central part of the country (up to the Gibe river) and hence, encompassed Jimma (the former capital of Kaffa) as its center (see Appendix B). Ethnically, the people of the region are the Oromos and they earn their living from agriculture which is helped by wet climatic conditions and fertile soil throughout the region. In particular, the production of coffee is the predominant economic activity and this has helped the existence of large and dense forests in the region which help as shadows for the coffee plantations and seedlings.

To achieve the objectives of the study, three senior secondary schools namely: Jimma, Bedelle, and Mettu (see (Appendix C) were sampled on the basis of their geographical

proximity to the center (Addis Ababa), that is, one nearer (Jimma- 330 Km^{s}, from the center), the other from the remotest part of the region (Mettu- 676 Km^{s}, from the center), and the third located between Jimma and Mettu (Bedelle- 475 Km^{s}, from Addis Ababa) so that the rest of the schools in the region could be represented. Geographically, the three senior secondary schools are located on the same line (on the main high way running from Addis Ababa to Gambella) and are situated in the suburb areas of their respective towns occupying spacious areas convinient for carrying out of class activities like project works and club activities.

Relevant information has been secured from primary and secondary sources. Related literature - books, Journals, and articles have been reviewed. From the sample of the three schools, teachers of the academic subjects were taken as the subjects of the study. The academic subjects were chosen on the basis of the writer's background in academic areas and vocational subjects were excluded since the writer believed that these subjects require experts in the field. In addition, directors, deputy directors, unit leaders, and students were included to gather relevant data relating to the study (see Appendix D).

Questionaire, interviews, and observations (see Appendix E, F, and G) were the major data collecting instruments. The draft questionaire were first distributed to a sample of secondary school teachers in Debrezeit. On the basis of the feedback received from these teachers, some alterations were

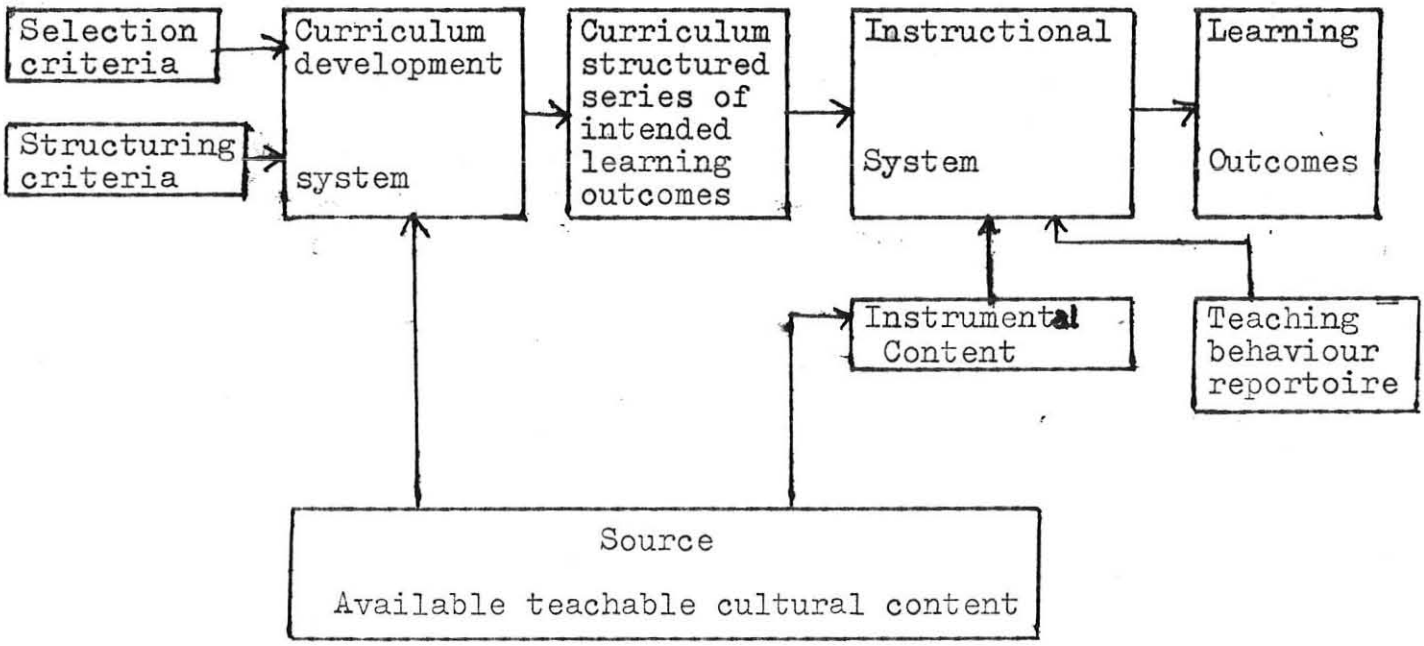
made on the draft questionaire (the number of items were reduced, the open ended items were minimized and rating scales were developed for some of the items as required), and the final questionaire, observation checklists, and interview guides were prepared.

Data were collected from teachers of the academic subjects through questionaire, interviews and observations. In addition, directors and unit leaders were interviewed to secure further data. Furthermore, students were randomly interviewed and were also observed during actual teaching and learning in the classroom.

The data collected through questionaire have been tallied and changed to scores. Those scores derived from items having rating scales were analyzed using averages so that they could be manageable to give a general picture. The data collected through actual classroom observations using the "yes" and "no" dicotomy regarding the teaching techniques demonstrated by all teachers observed were analyzed using the Chi-Square (X^2) test since it is statistically agreed that the Chi-Square test "is used to determine whether there is a statistically significant discrepancy between the actual (observed) distribution of responses or ratings among categories and the theoretical (expected) distribution (Cates, 1985, p.177). Furthermore, some of the data collected through observations and interviews were analyzed on the basis of what research in the field of curriculum

and instruction has established. In particular, Johnson's model which shows curriculum as an output of one system (curriculum development system) and as an input of another system (instruction system) was taken as a frame of reference for this study. This model is presented below.

A Model of Curriculum Theory*



The model seems to indicate the fact that the source of curriculum is the total available culture, that is, those elements of the content of the culture which are considered appropriate or relevant to the instructional aims of the school. In fact, when

*Johnson, M. (1981). "Models in Curriculum Theory", in Giroux; et. al., eds. Curriculum and Instruction. Berkeley, California : McCutchan Publishing Co.

taken at its face value, the concept culture could mean so many things. For example, artifacts and social institutions are components of a culture, but they are not teachable. In addition some knowledge and skills which are teachable and very much a part of the culture are not availabe for curriculum since they are kept secrete by families, craft groups, governments and the like. The sources of curriculum, therefore, are those knowledges, skills, and attitudes in a given culture which are teachable and at the same time available for the curriculum.

It is further observed from the model that if all that is component of a culture and teachable but may not be available for curriculum implies the need for a selection criteria. Depending on the ideology of who ever concerned, the selection criteria could either be the organized field of knowledge, experiences and interests of the potential learners, persistent problems of living or the combination of all of these.

On the basis of the selection criteria developed those elements of the contents of the culture are selected. Still there is another important procedure which needs attention. This is the establishment of the structuring criteria. Structure refers to the relationship among curriculum clusters (facts, concepts, generalizations) selected from the contents of the culture. It is concerned with the proper ordering and

hierarchical relationships among curriculum items. Therefore, the process of selecting the elements of contents of the culture and ordering them on the logic of their hierarchical relationships, according to the model, constitutes the curriculum development system - the outcome of which constitutes the curriculum (structured series of intended learning outcomes). Curriculum, therefore, has reference to what it is intended that students learn.

The model further indicates that curriculum is an output of the curriculum development system and an input into the instructional system - a system consisting of the interaction between the teacher and the student and between the student and the environment manipulated by the teacher. Those skills, knowledge, and attitudes that the learners develop as a result of these interactions in the instructional system constitute the learning outcomes, which, other than the curriculum contents, depend up on the instrumental contents and the quality of individual performance of teachers - the purpose for which this study was carried out.

Eventually, quoting Gage (1966) and Eisner (1965) who viewed curriculum as "a series of content units (a capability to be acquired under a single set of learning conditions) and as a series of activities respectively", Johnson strongly argues that the curriculum must leave some room for creativity and individual styles of teachers in instruction, since, the curriculum may limit the range of possible learning experiences

but can not fully specify them. Thus, decisions regarding the learning experiences to be provided (the result of instructional planning), the means, that is the methods and techniques of teaching and learning the materials and the instructional contents to be used in achieving the results fall within the sphere of the responsibility of the teacher. Teachers, therefore, decide what to teach and how to order what they teach, make the final choice of learning activities and instrumental contents (anything that facilitates the desired learning) in terms of the students, the availability of resources and the needs of the ongoing instructional process. It is this teachers' reportoire of teaching behaviours that has been used as a frame of analysis in the study. Hence, Johnson's model has contributed a great deal in carrying out this thesis project, in that, due reference has been made to it in stating the problem of the study, in choosing and developing the data collecting instruments, and in gathering relevant informations from those concerned with the implementation of the curriculum of the academic subjects in Illubabor senior secondary schools.

1.5. Limitation of The Study

As we all very well know, a research dealing with assessment of the magnitude of a certain problem entails collecting and processing as much data as possible. This in turn requires adequate time, money, and energy. In particular, when the subjects of the study are located at distant places from one

another (like teachers of Jimma, Bedelle, and Mettu) financial and material services are earnestly needed to facilitate the process of data collection. In this regard, the School of Graduate Studies did not fully accept the fund approved by the Faculty Graduate Commission for this thesis project. Even, the little fund allowed by the School of Graduate Studies has not been fully and duely allocated because of the procedural complications persisting between the financial department of the University and the School of Graduate Studies. This problem, coupled with the shortage of public transportation in this country have greatly violated the schedule of this research project. Nevertheless, adequate care has been made to preserve the quality of the paper by sacrificing whatever financial, material, and energy it required.

1.6. Organization of The Study

Four major parts are incorporated in this paper. The first part includes introduction : Statment of the problem and its delimitation, significance of the study; methods, procedures and sources of data, limitations of the study and organization of the study. Part two deals with the review of secondary information collected from various sources and organized on the logic of their relationships to the problem. The report, analysis and interpretation of the primary data collected from the subjects of the study is exclusively presented under part three. The last part deals with summary of the findings, conclusions, and recommendations; and these are followed by Bibliography, Glossary of terms, and Appendices.

II. REVIEW OF LITERATURE

2.1. The Nature and Constituents of Curriculum

No time in the history of education have philosophers and educators agreed upon what true education is in general and what constitutes curriculum in particular. Though literature is inadequate as to how the modern society came to organize its intellectual world into categories such as fields of study and the disciplines of knowledge since the ancient times, it is easy to imagine that since society could not deal with everything at once, people found it necessary to give attention first to one aspect of the environment and then to another, depending upon their needs and activities. Beginning probably with such gross categories as fire and water, they in time learned that some classifications were more productive guides to behaviour than others. It may be reasonable to suppose that out of these groupings evolved the fields of knowledge and the modes of inquiry underlying them in the civilization of today. Nevertheless, the concept of curriculum and what it constitutes, from the historic perspective, could be better understood when seen in light of the major curricular ideologies (Curricular schools of thought).

2.1.1. Curriculum and The Academic Scholar Ideology

The basic argument of the Academic Scholar Ideology rests upon faculty psychology and disciplining the mind. Bestor (1965) writes that "discipline is not a matter of punishment, it is a matter of effective training a man with a disciplined mind is a man equiped with intellectual means" (P. 37). It is observed from this that the postulated service in training (developing) the powers of the mind (disciplinary value) is a more important criterion to signify the nature of curriculum. Accordingly, the pursuite for intellectual excellence is the key noteof the academic scholar ideology.

A host of other proponents of the scholar academy strongly confirm that the function of schooling is intellectual training. According to Phenix, quoted in Devis (1963) "only knowledge drawn from the disciplines is appropriate to the curriculum" (P. 246). Endrsing this view, Bellack (1965), King and Brownell (1966), and Foshy (1961) have stressed that languages (including foreign), history, sciences, and Mathematics should constitute the core of any program of intellectual discipline. Hence, a child who acquires an adequate stock of skills (mental skills) and information and whose mental powers were developed and trained was equiped to live efficiently, that is, to deal with the tasks of life effectively.

The criterion of the disciplinary value of the contents of curriculum was also influential in determining the organaization

of curriculum. To this end, Bellack and Bruner (1960: PP 6-8) have insisted on the need to develop the structure of the disciplines so as to promote relationship among allied disciplines and relationship among the broad areas of knowledge. Therefore, according to the scholar academics, Curriculum is defined as a programe of education which includes facts, concepts, principles, laws, generalizations and etc. selected from the disciplines of knowledge and organized on the logic of relationships together with learning experiences enhancing memorization, reasoning and logical thinking.

2.1.2. Curriculum And The Social Efficiency Ideology.

Shortly after 1900, research on transfer of training (Tyler, 1986/87, PP. 36 - 38) undermined the faith in the disciplinary function of subject matter. This development and related changes in teaching and learning theory resulted in emphasis on social usage as an important criterion of curriculum. Besides the work of Thorndike on the transfer of training, the application of the idustrial efficiency model to schools by Bobbit and his Colleagues (Kliebard, 1975, PP. 51-67) was an important curricular event since it became a firm basis for the statement of educational objectives in behavioural terms and the analysis of contemporary adult activities to be included in the curriculum. The begining of measuring educational outcomes (evaluation) interms of standards set (efficiency in adult activities) was another curricular innovation since, until that time, "there

were only three components of the curriculum; namely: determination of objectives, selection of contents and organization of contents" (Smith, 1976: P. 191).

With the advent of the utility function of schooling, that is, the preparation of children for useful adult activitiesy the need for useful and applicable knowledge was strongly recommended, On account of this Eble (1972; PP. 3 - 8) argues that schools are for learning, and what ought to be learned mainly is useful knowlege. He further noted that schools ought to make major efforts in cognitive development. This assertion of Ebal for congnitive learning seems to be different from the intellectual pursuite of the acholar academics in that the emphasis here is the application of the mental faculties in what all men as adults are engaged to sustain a culture and improve the existing material society.

Therefore, advocates of the social efficiency call for a curriculum in which the problems and interests of everday living are included and which have meaning for children and youth. The educational programme aims to help children and youth develop the knowledge, skills and attitudes necessary to cope with the immediate situations of everday living (production, commerce, ~~x~~ civic acctivities, social adaptation, leisure, etc). This does not mean that concern is not made for intellectual growth of the learners. Rather, as so ably put by Stratmayer (1965, PP. 25-33)

A typical earlier advocate for concerns of the child was Rousseau. In this work-Emil, he showed his particular position by saying "respect the child and be in no haste to judge his action, good or evil---let nature be long at work with the child" (P. 207). Rousseau's conceptions of a child were not widely pronounced, but had to wait until 1904 when the idea of Child interest was further ignited as aresult of "the little laboratory school carried out by John and Marry Dewey from 1896 to 1904" (Othanel, et. al, 1950, P. 413). The result of this experiment, beyond further illuminating the Child-centered movement, became the basis for Deway's educational theories.

On the basis of the Eight year experiment, Dewey stated that "the life of the school was to be active, not passive the Children were to work, not merely to listen" (1956, P. II). At first glance, it appears that Dewey waged war against the doctrine of the mental discipline. Thus, this was an attack of traditionalism and a reform movement in education which called for education drawn from within by reconstructing the experience of the child. In spite of this, Dewey does not seem to be an ardent advocate of the Child-centered school if one sees his statement which says "the fundamental factors in education are the immature and undeveloped being and certain social aims, meanings, values incarnate in the matured experience of the adult. The educative process is the due interaction of theseforces" (P. VII).

Hence, unlike the extreemists of the Child-centered school, Dewey seems to hold an interactive position since he tries to interprete the experiences, needs, and interests of the child in the context of a given social aim and experience.

Rather, among the most extreeme and earlier supporters of the Child-centered school, Harold Rugg, Anne Schumaker, William kilpatrick, and Parker are worthy to mention. In particular, the outcome of Meriams laboratory school at the University of Missouri since 1904 and kilpatrick's intelligble work on the project method (Rugg and Schumaker, 1969, P. 41-46) brought a further upheaval for the doctrine of the Child-centered school. Both Meriam and Kilpatrick underlined that the kind of school needed was a school of life, of actual experiencing, a place where pupils are active, where pupils enterprise from the typical unit of learning procedures, for purposeful activity is the worthy life whatever lived. This statement became the mote of the Child-centered school and caused the wide spread establishment of Child-centered schools since the 1920^{s}.

Like any school of thought which has certain frame work of ideas on which its philosophy is based, the Child-centered school has certain basic assumptions as they relate to the child. Ruggand Schumaker have explicitly stated these assumptions as:

- freedom, not restraint
- pupil initiative, not teacher initiative
- the active, not the passive school
- child interest as the orienting
- center of the school program (P. 60).

An attempt to scrutinize these assumptions clearly shows that the Child Centered School endeavored to discard the widely prevalent concepts of the traditional formal education - the training of the faculties through repeated exercises, strict discipline and preparation for life. Hence, instead of the restricted and rigid traditional schooling, here, the learner is seen to be free, to move about at his own discertion, to play, to work, and to develop naturally (without direct external influence of adults), to select his area of interest for learning. "The routine needs of the school, as well as the lesson assignments, the planning of excursions and exhibits, and the criticism of reports are taken over by the pupil (p.57). In the school the learnefs are active, working hard, inventing, organizing, contributing original ideas, assembling materials, and carrying out enterprises at their own accord. Further, the assumptions imply that education is not for conformity and social adjustment but, as Othanel (1976, pp.243-244) has explained, encouragement of the creative spirit of the learner from within rather than conformity to a pattern imposed from without. Thus, the felt needs and interests of the child represent an essential basis for the aims of schooling rather than a broad view of societal experience and efficiency in minimal essentials (knowledge, skills, and attitudes). Therefore, the Child centered schools believe that each and every child is endowed with the capacity to express himself and that this innate capacity is immensly worth cultivating though a variety of activities suited to individual or group peculiarities. Hence, according to the

Child-centered school, curriculum is defined as a program of schooling which embodies a continuing stream of child activities, unbroken by systematic subjects, and springing from the interests and personality felt needs of the child (p.36).

In the final analysis, in the Child-centered schools, knowledge is not what the child accepts as it is preplanned and patterned for him but, it is what the child assimilates as a result of working, playing, producing,and interacting with the surrounding world. Knowledge is not the views, ideas, and conceptions that the teacher passes on to the learner but, it is what the child develops from his own through the guidance of the teacher using various activities suited to his purpose, and through the use of organized subject matter as needed to promote new interests leading to further activities.

2.1.4. Curriculum and the Social Reconstructionists

Neither the concept of the Child-centered ideology nor the criterion of the social efficiency school involved explicit concern about the general social status or the direction of social change. As a result of this,poineer thinkers began to urge that the kind of society desired in the future should be recognized in curriculum development. Later, this resulted in the evolution of a school of thought called the Reconstructionists.

According to the view held by this school of thought, the society is ill due to sanity and maddness for the pursuit of private interests (Brameld, 1972: pp.9-15, Pinnar, 1975) and

the result is problem of war, child abuses, exploitation, etc. Hence, they assume that the world is at a web of crises inherent in the culture of the society. As convincingly presented by Brammeld (1965), the reconstructionists assume that man is a goal seeking animal and that is now possible, particularly with the aid of the human science such as Anthropology, Sociology and Psychology, to begin to delineate the fundamental goals of man - what he is gropping for, what he wants in life - in a way that was not possible in earlier, less scientific times. As such, they argue that man can use education to realize his intentions, that is, through education which, for that very reason, is inspired with enthusiasm for research, for diffussion of knowledge, for humanly realized beauty and goodness.

In support of the views stated in the preceding paragraph, George counts; the renowned proponent of Reconstructionism, defining education as an expression of a given culture, strongly argues that schools should become centers for the building and not merely for the contemplation of civilizations. He further notes that teaching is a tremendous and difficult task that involves the guiding of individuals to full maturity and freedom, of inducing him into the most complex and dynamic society of history, of preparing him to assume the heavy duties of managing that society and of transmitting its heritage of liberty un impaired and even enhanced to his children (1976, pp.505-509). It could be observed from these statements of counts that the basic social purpose of education can not be comprehended simply

as the perpetuation of the status quo but the purpose must include, as its central focus, the continious reconstruction of ideas and instituations required to make society more and more perfect in the future. In this connection, Brammeld notes that the crucial problems of politics, economics, religion, aesthetics and educational life should be brought into the center of the curriculum and not left on the periphery.

Therefore, according to the Reconstructionists, curriculum could be defind as a plan for an educational programs which consists a careful study of the significant social problems confronting the people, ordered and arranged with due regard for the abilities, interests and needs of children so that the pupils could think, judge and act intelligently.

2.1.5. Knowledge, Learners, Society and the Curriculum

A close examination of the views held by the various curricular schools of thought presented in the preceding pages clearly show a shift in the degree of emphasis over time as to which of the three elements (knowledge, learners, society) should serve as basis for curriculum. One could observe that since about one hundred years ago the emphasis was almost exclusively on knowledge. Hence, one rarely hears terms such as the needs, interests and developmental tasks of children which were so common in the late thirties and early forties. However, increased attention was given to the learners as a result of the works of Dewey, Meriam and Kilpatrick. Further, Bobbit's analytical work

(the industrial efficiency model) and its application to school instruction emphasized the role of education in preparing individuals to live in society. Saylor (1981) Speaks of the more prominence of this issue during the depression years of the 1930s and again in the 1970s. (pp.113-119). In addition, Jhon Goodlad (1966) notes the prevalence of evidences indicating the existence of some reversals and the re-emphasis of the subject matter concepts and structures in the Fifties and Sixties (pp.174-175). Hence, one could learn from the above assertions that there has been no unanimity as to whether, either knowledge, learner or the society should be given greater emphasis in the curriculum.

These days, the tendency is towards bringing a balance in the curriculum. To this end Saylor and et. al. (1981) strongly stressed that "one secrete of effective curriculum planning is to assign appropriate weights to a consideration of society, learners and knowledge (p.19). This is not without a reason. When emphasis is put on knowledge (subject matter) only, the programme of schooling may be unrelated to the learners needs and interests and the learners may not be responsive to the educational programme. On the otherhand, when the degree of emphasis is in favour of the needs and interests of the learners, the result could be the presence of large gaps in the knowledge required in todays civilization. Equally, the problems, needs, and the requirements of the society for which the school itself is apart and should serve it may be overshadowed. Further, a programme designed to meet the present needs of a society may

block the learners opportunity to generate new knowledge and produce new ideas. Therefore, there is a greatest need to promote an appropriate balance between the learner, the society and knowledge.

A rational balance between the learner, knowledge and the society requires the use of needs assessment. As Roger and associates (1981) have noted "assessing the needs reveals the existing gaps" (pp.612-613). Assessing the needs is the best outlet to identify what really exists and what ought to exist, and when implied to curriculum, it enables one to find out what contents are there in the curriculum and what ought to be discarded and which ones to be included. Thus the most basic gaps to which the needs assessment should adress itself are those found in the society-gaps in values, aspirations, making a living and the resulting standard of living. An answer needs to be given to such questions as what modes of conduct and behaviour are sought to be developed by schools. What requirements (current and future) for the individual and the collective self sufficiency in the society is needed? An effort to answer these basic curricular questions through needs assessment could help to provide appropriate balance in curriculum. Further, needs assessment, through the use of opinion polls, interviews, observations and questionaire could help to clearly find out the needs and interests of the learners so that the existing gaps and needed modifications can be identified. At this juncture, it must be noted that the needs and interests of the learners should not be taken at their face value (letting the child as he wishes)

but, as Tyler (1949) has indicated, it must be understood as "the differences in gap when compared with some desirable standards and the needed changes in behaviour to fill this gap" (p.6).

Needs assessment also helps to establish a theme of analysis and inquiries into the contemporary scientific knowledge. This is because of the fact that advances in science, technology, and research from time to time generate new facts, concepts, rules, and principles. This expands the stock of knowledge available, and, at the same time, results in the obsolescence of the previous facts, principles, and theories. This would help to discured simple facts and trivial information (lower levels of knowledge) but enables one to emphasize basic ideas promoting breadth and depth of understanding in the educational programme. In such a case, knowledge becomes fundamental and could be applied in various situations (significance of knowledge).

Another crucial importance of needs assessment is its role in matching the educational program with social realities. This entails a careful study of the society-its culture, its problems and prospects, its mode of living, its political, and economic realities so that the urgent (prior) societal needs and requirements could be identified and given appropriate weights in the curriculum. This has been explicitly discussed by Taba (1962: pp.265-268), and Saylor (pp.132-136).

In conclusion, on the basis of the question "what should constitute a curriculum and what should not", a range of opinions exist among educators and different positions are held.

The first position, at one extreme, limites the schools responsibility to the intellectual training of children and restricts the curriculum almost exclusively to academic subjects. The second position stresses the social utility of schooling, and gives due emphasis for adult activities as the orienting center of curriculum. The third position has a strong faith in the child and advocates for a curriculum including a wide variety of activities and related subjects from the fields of knowledge suited to the felt needs and interests of the learner.

The last position, while taking into account the balance between the fields of knowledge and the needs and interests of the learners, stresses the need to reconstruct the society by including elements of the culture in the curriculum. Inspite of these varying opinions, the tendency, these days, is to give appropriate balance between knowledge, the learner, and the society. As a result of this, the use of needs assessment has become an important procedure to assign appropriate balance in the curriculum.

2.2. The Ethiopian School Curriculum : A Brief Historical Development

Though the exact date of the introduction of formal education to Ethiopia seems to be unknown, historians like Pankhurst (1955) confirm that the history of education in this country goes as far back as the 4th century A.D. (p.232). History tells us that it was in the 4th century that Christianity was introduced to Ethiopia and therefore, marked the founding of the Ethiopian

and therefore, marked the founding of the Ethiopian Orthodox church which, as clearly presented by Girma Amare (in the Ethiopian Journal of Education, undated) remained as the major institution of education until the introduction of modern education to the country. In its history, the church education had played a significant role in producing "civil servants for the state machinery (Judges, governers, scribes, treasurers, and general administrators), in perpetuating the cultural values of the Ethiopian society and in preparing young men for the services of the church as deacons and priests (Teshome, 1979, pp.11-12).

Another major institution worthy of mentioning as regards the history of Ethiopian education is the Mosque which, like the church, had a similar function in running Koranic schools in Moslem areas of the country. According to the discussion made with Dr. Abebe Ghidey (1991, unpaged) Islamic communities in Ethiopia - in Jimma, in Ogaden, in the low lands of Eritrea and etc. and Islamic rulers like the Emir of Harar had been encouraging Koranic schools materially and financially. In spite of this, the influence of Koranic education was very low as compared to that of the church since, before the introduction of the Islam religion in the 7th century, the christian religion had established a strong relationship with the ruling classes. This, as Markakis (1974) has wrote, confined Koranic education to Mosques and "to be run by local Islamic committees themselves who received no state assistance of any kind" (pp.155-156).

In the 16th century, the Reformation movement in Europe resulted in the blobal expansion of the Jesuit missionaries to spread the Catholic religion. Beven (1976) wrote that the Jesuits had made an attempt to open schools of a European type in Ethiopia during their missionary activities (p.310).

However, he further noted that the efforts made since the 16th century to open modern schools in Ethiopia faced a strong opposition from the clergy who feared that the attempt was made to convert the country to Catholicism. Hence, the Ethiopian traditional church had been opposed to any external attempt to open modern schools in the country and thus, education remain in the maid of Theology until the beginning of the 20th century.

The main objective of church education (curricular objectives) until the introduction of modern education was primarily the training of loyal and spiritual personnel who could meet the man power requirements of the church and the nobility (MOE, 1980, passim). Holy books like the Bible and the Koran were the main teaching materials whose contents were purely Theological (ibid.). Recitation and memorization were the major methods of teaching in the Kuranic and church schools.

The need for modern education was greatly felt with "the establishment of a central state authority" (MOE, 1984, p.4), the development of foreign relations because of the vittory gained by the battle of Adwa and the construction of the Addis-Djibouti rail road which accelerated the development of modern economic sector (Hess, 1970, p.59). Consequently, Emperor Menelik took the lead and, for the first time, opened a modern school in Addis Ababa in 1908. Menelik the II school, named after the Emperor himself, has been the oldest modern school and, today it is one of the largest senior secondary schools in Addis Ababa, Ayalew (in Ethiopian observer) reports that

"three more schools - one each in Harar, Dessie, and Ankober were opened by Menelik after a while" (p.9). Hence, the openning of Menelik the II school and the other subsequent ones marked a turn in the history of Ethiopian education and brought a further upheaval in the expansion of modern schools in the country. To this end, Teshome reports that "by 1935 when the fascists struck, there were 21 government schools and a couple of other mission schools with a total enrollment of 4200 students" (p.40).

In spite of the efforts made by Menelik and his followers, the Italian fascists destroyed and misused almost all the educational establishments laid down during the pre-war years. Gilkes (1975) reports that the Italians further went to the extent of "purposely and systematically massacring the few pre-war educated youngesters (p.38). Nevertheless, as reported by Dr. Abebe, they started their own primary schools (up to 6th grade) in Keren, Asmara, Adwugri, BahirDar, Tigray and others. Later, as fascisim greatly expanded, education became very much restricted (only up to 4th grade) and was given only in Italian languages. Infact, the purpose was to train clerks, typists, and interpreters. Betweded Asfaha, the Italian educated, was one of the known Italian interpreters during the time. Hence, when the country librated itself from the Italians, education had to start from sero.

Immediately after the libration 1941, reconstruction began with the main emphasis to create an educational system that could supply small corpse of clerical, technical, and administrative personnel to run the government mechinery (Lipsky, 1962, p.90). In 1942, the MOE was re-established and boards of education were set up to facilitate the re-expansion of education. By decree No.3 of 1944, the missionaries were officially invited to participate in the reconstruction of education. Since then, a remarkable increase in the number of schools was made. Teshome reports that by the end of the decade in 1950, there were 540 schools of all types (p.80). During the following

and higher education was developed. According to the new structure, there were two routes to higher education. One is the general polytechnical education which lasts for 10 years (grade 1-10) and in which academic subjects and vocational subjects were given to prepare the learners for labour (at the end of the 10th grade) and the second is higher education (after 10 plus 2 years of academic and vocational preparation). The new structure emphasized that the students should take apprentice training in the elementary school and practical training on the job (working in the factories and industries) during the rest of the years up to 10th grade.

The other route to higher education was designed for adults who have already acquired jobs. Accordingly, those who have completed primary education would continue their studies to higher education through the continuing education programme. Special education (for the handicapped) follows the same line as that of the first route (see Appendix H).

Since the development of the new structure of education in 1978, the Curriculum Development and Research Institute (CDRI) of the MOE, through the curriculum panels established for the respective subject areas, was vested with the task of preparing curriculum guides (syllabuses) and teaching materials - both for the polytechnical schools (grade 1-8 experimental schools) and for the regular senior secondary schools. The curriculum panels, therefore, had to revise the previous comprehensive secondary school curriculum guides on the one hand and prepare new

curriculum guides for the experimental schools on the other. In particular, curricular objectives, contents and prescribed teaching aids were prepared for the academic subjects given in the senior secondary schools currently.

The curricular objectives of the secondary school subjects (academic) were listed in the syllabuses of the respective subject areas in accordance with Bloom's taxonomy of educational objectives (1956), that is, consideration was made for the cognitive, affective, and the psychomotor domains. However, the phrasing of the intended learning out comes relating to the three domaines seems to be deficient in some of the syllabuses. A few examples which could justify this line of argument are given below.

According to the mathematics syllabus (grade 1-12) (1981, pp pp.36-43) some of the curricular objectives were stated as: to have knowledge and understanding of mathematical facts and concepts, to attack and solve problems, and to have an attitude of self confidence. These three objectives are stated in relation to the cognitive, psychomotor, and affective domaines. However, they are phrased improperly since they do not indicate the one who is to understand, attack problems or develop an attitude of self confidence in such a way that the intended learning outcomes could be clearly understood. Hence, they ought to have been stated as "the students would understand facts and concepts, would attack and solve problems and develop confidence in solving problems by manipulating Mathematical symbols and formulas.

Another Syllabus worthy of mentioning as an example of a curriculum guide with deficiently stated objectives is the social science syllabus (1980). Objectives such as enable the students acquire skills in measuring distances on maps, impart to students knowledge on the ways of life of man, and enable students develop an appreciation of the need for mutual interdependence of peoples of the world (pp.13-15) are found to be improperly phrased since they indicate the activities of the teacher rather than the learning outcomes to be demonstrated by the learners. Thus, the objectives should have been stated as "the students would measured distances on maps, know the ways of life of man, and appreciate the interdependence of people of the world. When objectives are stated in such a clear manner teachers would find it easy to prepare specific instructional objectives and select relevant contents and activities to facilitate curriculum implementation.

There were some curriculum guides which properly included the three domaines and which were also properly phrased. The science curriculum guides deserve a good example. For example, in the curriculum guides for chemistry grades 9,10,11, and grade 12 (1984,1986,and 1989 respectively), coherent and clear objectives were stated. For instance the objectives in the curriculum guide for grade 9 chemistry were stated as "at the end, the students would be able to explain the role of chemistry in production (cognitive), calculate densities from a given data (psychomotor), and shall be able to discuss that Chemical knowledge can be used for the benefit and for the

harm of man kind" (affective) (pp.2-4). Similar objectives were stated for physics grade 9-12 (see curriculum guides, 1985, 1986, 1989 and 1990, pp.1-5 respectively).

Concomitant with the objectives and the learning outcomes developed in the curriculum guides, text books have been prepared for each grade level. Infact, an outline of contents for each grade level and the necessary practical activities have been indicated in the curriculum guides (see curriculum guides for physics grade 9, pp.iii-iv, grade 10, pp.6-10, grade 11, pp.1-4, and grade 12, pp.2-6). The same has been done for all other academic subjects. Nevertheless, there are no teachers' guides for subjects like geography, the sciences, and history. Languages and mathematics have teachers' guides. In the case of subjects which do not have teachers guides, the respective pannel heads have indicated that teachers are required to strictly follow the curriculum guides to structure and present the contents in the students' texts during instruction. Similar obligations are stated in the curriculum guides as well. For example, in the grade 9 physics curriculum it is stated that "teachers are strongly advised to constantly refer to the curriculum guide as it is the central document for all other activities and materials of instruction"(p.8).

In the absence of the teachers' guide for subjects like the above, it appears that, there is a great need for teachers' decisions regarding what to teach and how to put in order what they teach, determine the teaching aids and prepare them for use during instruction, and identify the methods and techniques to be employed

during the implementation of curriculum. In other words, it means that teachers need to make some sort of selecting, some sort of organizing, and some sort of presenting the curriculum contents in accordance with the existing resources, individual peculiarities of the learners and the exigencies of the on going instructional process. Selection, because it is impossible to teach all that is included in the curriculum; organizing, because it may be impossible to teach all of what has been selected at once - teachers are forced to put something before or after something else; presentation, because it is impossible to teach without communication or trying to communicate something to the learners.

2.3. Curriculum Implementation

A plan for an educational programm , that is, curriculum is prepared for some intended purpose. The primary purpose of a curriculum is its being used by formal schools with the view to bring about a behavioural change in the learners so that the objectives of education in general and the aims of schooling in particular could be met. To do this, the curriculum must be implemented.

By curriculum implementation is meant the actual execution of the curriculum plan through the instruction process in schools. "It is the launching of an educational programme in all schools or in selected schools" (Curriculum Department, 1981, p.110). Curriculum implementation and instruction are inseparable. One can not go without the other. It is because of this that Saylor and his associates explicitly define instruction as "the implementation of the curriculum plan" (p.257).

If a Curriculum plan is to be used, it must be capable of being executed through the instrudtion process in schools. If not, as Saylor and his associates have noted, "is of no value" (p.264). Thus instruction in schools is the kernel of curriculum implementation. On the otherhand, instruction in schools can not be conceived in the absence of the teacher. The teacher is the director of instruction. He is the one who translates the intentions framed in the curriculum into action through a multitude of activities occuring both inside and outside the classroom. In his curriculum and instruction model, Johnson (1981) has clearly stated that "it is teachers who make the final choice of learning activities and instrumental contents in terms of the characteristics of the students, the availability of resources and the exigencies of the ongoing instructional process (p.14). But, it seems worthy to note that, whatever decisions and choices that teachers make to facilitate instruction is always governed by the intended learning outcomes stipulated by the curriculum and incorporated into the course and the units. Nevertheless, one could easily observe that the role of teachers is very important in any teaching strategy to implement the curriculum plan.

2.3.1. Teacher's Knowledge of the Subject Matter and Curriculum Implementation

One of the major qualities that a teacher needs to possess to implement the curriculum plan effectively is a sound knowledge of the subject he teaches. A sound knowledge of a subject one

is concerned with, according to Tucker and Drucker (1988) entails a conceptual mastery of the subject, strong analytical skills involved, the ability to communicate well, and all other things educators put in the category of higher order thinking ability (pp.44-46). Tucker and his colleague proceed to the extent of saying that until teachers can demonstrate a high standards for professional competence, they will neither be paid as professionals nor given professional autonomy. The two educators seem to emphasize the fact that a teacher must know the facts, concepts, basic ideas, and generalizations underlying his subject and at the same time be in a position to identify the relationships between the concepts, basic ideas and generalizations between his subject and that of others so as to recognize the organizational principles involved. A simple example could be taken to demonstrate what Tucker and Drucker are after. For instance, a mathematics teacher presenting the set of Real numbers as a universal set during a given lesson must know the concepts" universl" and "set" separately and their meaning when combined, that is, "universal set." Further more, he should know the various components of sets of real numbers that is, the set of counting numbers, the set of whole numbers, the set of integers, the set of rational numbers, and the set of irrational numbers. Not only these components of numbers are worth knowing but the order in which they should occur when listed on the numberline equally matters whether or not they can constitute the components of the set of real numbers. The set of real numbers

is considered as a universal set simply because the other sets of numbers are the proper subsets of it or all are included in it. Hence, a strong analytical thinking demands of the teacher to identify the parts and combine the component parts to form a whole. He must also be in a position to instruct or teach others, that is, help students so that, they too, can combine facts to form concepts and combine concepts to form basic ideas and generalizations. Such is a professionally competent teacher who, in other words, is knowledgeable in his subject and trained in the methods and techniques of teaching his subject.

King and Brownell state that the teacher must be qualified in the special knowledge (subject area) and art of furthering the encounter of the neophyte (methods and techniques) (pp.156-164). They further note that the teacher must be at home in the intellectual world. That means, he must be a reader, a playgoer, artist and listener so that he can have a mature perspective and his study will be broad enough to support him as he participates in the life of the school. Hence, King and Brownell seem to endorse the statement that a well prepared teacher (who is certified and competent in his subject and in methods and techniques of teaching it) emerging from a well devised programme of education courses and experiences, and who always acquaintes himself with new knowledge through reading, looks with understanding eyes upon the learners and his task. In other words, such a teacher is distnictive in attitude, in competence, in breadth of vision, and in his assessment of the potentialities of learning for the individuals he teaches.

Counts stressed that a good teacher must know his subject matter, he should indeed be a scholar who has command of the knowledge of his speciality (p.508). So that he can concisely state the objectives of his course and realize them systematically by giving assignments on significant issues appealing to the learners.

Early studies carried out by Shuster (1955, pp.258-262) evidenced that teachers with less professional preparation (academic & pedagogical) had more initial problems of adjustment to classroom teaching than beginning teachers who met state certification requirements; and that those teachers with the most professional preparation tended to remain in the profession; while those with few or no professional training tended to drop out of the profession. Hence, teacher's profound knowledge of the subject he teaches, that is, his academic competence and his mastery of the methods, techniques and principles (a result of adequate training) underlying his subject, among other things, makes him like his profession, and therefore, promotes his retention in teaching.

In congruence with Shuster's study, McCormick (1979), on the basis of empirical investigations regarding the difference between effective schools and less effective ones, concluded that other than the teachers use of practices consistent with principles of learning and their awareness of the particular characteristics of the group of students being taught, teachers

understanding of the structure and substance of the contents being taught were found to be significant (59-62). Understanding of the substance and the structure of the contents being taught is nothing more than the result of a profound knowledge of the teacher in the subject he teaches. Further, it appears that, adequate mastery of the techniques and principles of the subject one teachers is not an end by itself but it must also entail a solid knowledge of the subject being taught.

Eventually, knowledge of a subject matter enables the teacher to be more specific in what he teaches, promotes precision in accuratelly judging the time needed to attain his objective, helps the teacher in structuring his lesson into manageable and logical sequence, and enables him to anticipate problems and events which require special attention. Further more, a profound knowledge of his subject makes the teacher to relate, with confidence, school learning with life by capitalizing on, and selecting from contemporary scientific knowledge.

2.3.2. Instructional Planning and Curriculum Implementation

A curriculum plan may specify and suggest objectives, instructional contents, student activities, and materials to be used. However this is not an end by itself. It is simply a blue print which is very far from the actual implementation, but very close to curriculum planners. It is just like a blue print for a building where the skill of a craftsman is very important to realize the blue print into a real building. By the same

tolken, the teacher is a craftsman whose skill is measured by the correspondence between the blue print (curriculum) and the building (implementation). As a craftsman begins the construction of a building by transforming the blue print of the building from paper to the ground basement, the teacher also starts implementing the curriculum first by planning instruction.

Planning for instruction is a guide for action. It is the entire teaching process in projection - the goals sought, what will probably be done to reach them, what is needed to take the proposed steps, and why it is important to actually take action. It is a continious process which occures before, during, and after the learning situation in the classroom. In support of this argument Johnson clearly states that "individual teachers continue the process of instructional planning upto and throughout the execution stage"(p.14). Hence, instructional planning provides teachers with the opportunity to think carefully about how best to help the learners achieve educational goals.

The use of planning is one of the principles of modern teaching to be carefully considered by all teachers so that they could secure systematic act of teaching in the classroom. If otherwise, teachers' sporadic actions in the classroom would be fruitless since proper teaching and learning can not occur in unplanned and haphazard activities. Planning is a fundamental basis for making instructional decisions pertinent to the contents to be taught and important ideas to be emphasized; the methods and techniques to be employed and the outcomes of learning to be assessed. The skill in making such instructional

decisions through planning marks the qualities of a good teacher. In this connection, Robert and et. al. (1983) note that "the ability to plan or to make decisions that will shape the course of instruction is central to the fulfillment of the professional role of the teacher (p.108). The instructional plan, then, carefully thought through in advance but flexibly used, is a basic tool for teachers. It provides a guide for action in working with pupils in the classroom.

There are three types of plans that are generally found most useful by teachers. These are the yearly plan, the unit plan and the daily lesson plan. The yearly plan is primarily a schedule of many unit plans in which the major areas of study are indicated. It is a brief outline which indicates major goals and schedules of the units to provide a balanced and complete programme so that events which require special materials or arrangements could be anticipated in advance. Such a scheduale can be of a considerable help in pacing the teacher so that he ends the school year having taught all of the material he expected to cover. The unit plan, on the otherhand, incorporates a series of daily lessons unified under a topic or theme, so that the fragmentation of learning which commonly occures when each day's lesson is treated separately could be avoided. It helps the teacher as a resource which enables to determine daily activities in the classroom.

The third type of planning is the daily lesson. It is a plan which, in major part, makes the teacher seriousely consider what to do with the students in the classroom, enabling him during this time to do something new with the subject.

The daily lesson is a very important plan in that it helps the teacher to carefully prepare a head of time what he is going to teach and how he is going to teach it during the given time period. This preparation serves as a guide and reference for the teacher, reminding him what to do, how to do it and for how long.

In planning instruction, next to the identification of a topic or a theme to be presented to the classroom, a teacher has to state instructional objectives clearly. Prominent educators are of the view that instructional objectives guide direction to learning activities (Dewey, 1959, p.119; Farrant, 1981, p.177; Ngongwikuo, 1990, p.40). Regardless of the subject being taught, there is a need to decide precisely what it is the students should be able to do as a consequence of their exposure to the instruction. Statement about what they should be able to do, or learning objectives help teachers to plan learning activities that will result in students having the desired knowledge, skills, and attitudes at the end of the period of instruction.

The extent to which the teacher structures the broad curricular goals more specifically to instructional objectives marks the implementation aspect of the curriculum. It is here that an aspect of the correspondance between the blue print (the curriculum plan) and instruction (implementation), should be shown through the skillfull planning of the teacher. But, as Taba (pp.195-197) has correctly pointed out, the degree to which curricular goals are lucid determines the statement of instructional objectives by the teacher.

If the statement of curricular goals are very general, they lack clarity of meaning and may mean different things to different teachers. Also, they do not help in guiding direction to reach the ends in view or anticipated objectives. To the contrary, if the curricular goals are clear (having a certain level of generality) they are useful in providing a sound direction for the selection or designing of instructional content and procedures, for evaluating or assessing the success of instruction, and for organizing the students' own efforts and activities for the accomplishment of the important instructional intents. To this end, Mager (1984) states that "if you know where you are going, you have a better chance of going there"(pp.1-6).

It seems evident that, curricular goals and instructional objectives must be stated clearly and, as Gronlund (1970, pp.1-4) has noted, framed in terms of the desired changes in the behaviour of the learner and not interms of the activities of the teacher. They should be realistic, that is to say, they must be achieveable in the course of instruction. One has to consider the materials and facilities available for the attainment of the objectives in schools. Otherwise, one may remain only at the level of ambition and end up with frustration. Objectives must always include the behaviour desired and the area of life or content in which this behaviour is to be applied. For example, the objective "to write a well organized reports of social studies project," includes both an indication of the type of behaviour namely writing clearly and well organized reports and also indicates the area of life (content), that is, social science project with which the reports are to deal(Tyler, pp.46-47).

Another matter of crucial importance to be considered by a teacher in implementing the curriculum is to plan for proper sequence structure of the content of the subject matter. He has to organize the contents in such a way that "they are continious-meaning the vertical reiteration or repeatition of the concepts, ideas, and skills from one lesson to the other or from one unit to the other (Tayler, pp.81-85). This means that over time, the same kinds of skills, ideas and concepts will be brought into continuing operation.

For example, if the objective in mathematics course is to develop a meaningful concept of logarithm, it is important that this concept be dealt with again and again in various parts of the algebra course. Continuity is thus seen to be a major factor in effective vertical organization. Corrollary to continuity, sequence is another aspect of vertical organization. It is possible that major aspects of the contents, that is, concepts, skills, and ideas may recurr (appear again and again) but merely, at the same level so that there is no progressive development of understanding, skills, or attitudes. Sequence as a criterion emphasizes the importance of having each successive experience built upon the preceding one but to go more broadly and deeply into the matters involved. For example, sequence in the development of logarithmic concepts should entail the provision of more complex problems in logarithm to be calculated and solved. Thus, sequence emphasizes not duplication, but higher levels of treatment with each successive learning experience.

Another important factor that a teacher has to give due consideration in planning instruction is keeping the integration of contents. This refers to the horizontal relationship of concepts, ideas, skills, and activities so that they could enable the learners increasingly to get a unified view and to unify his behaviour in relation to the concepts and skills dealt with. For example, in developing skills in handling logarithmic problems in algebra, it is also important to consider the ways in which these skills can be effectively utilized in physics, chemistry, Biology, social sciences, in the daily life of the learner in shops, in agriculture and the like. In such a case, behaviours are not developed only in isolated course or courses but are increasingly part of the total capacities of the learner, to be used in varied situations of his daily life. This promotes unity in the learners' understanding and outlooks. This is what Bruner has termed as learning a structure (1966, pp.7-8).

As quoted by King and Brownell, Bruner hypothesizes that learning structures

- is learning how things are related.
- makes a subject more comprehensible.
- slows foretting.
- permits reconstruction of detail through patterns.
- is the main read to transfer of training.
- narrows the gap between advanced and elementary knowledge.
- leads to intellectual excitement.
- supplies basis for and enhances intuitive thinking.
- is the bridge to simplicity (pp.90-91).

Hence Bruner, as it is further noted, makes a compelling assertion that teaching that emphasises the structure of a subject is probably even more valuable for the less able student than for the gifted one.

Phenix (1960) (pp.306-308) seems to expand Bruners assertions when he argues by stating that one of the secretes of good teaching is the practice of clearly charting away through the subject of instructions, so that the students know how each topic as it comes along fits into the whole scheme of the course and of the discipline to which it belongs. They understand where they are in relation to what has gone before and to what is to be studied subsequently. The effect of such teaching, as any one could imagine, is a growing appreciation of the inner logic of the subject, resulting at length in a grasp of its spirit and method which will be proof against the erosions of detailed forgetting. Therefore, to help the learners grasp the structure of subjects and subject matters the teacher is responsible to organize the contents properly. In spite of this fact, the ways in which the outlines of the contents of subjects are framed in the curriculum by curriculum planners determines the extent to which the teacher can structure them. Even then, as a professional person, the teacher can not and should not remain a spectator. He has to show an endeavour for structuring the contents and the learning experiences by designing and providing appropriate teaching and learning activities.

2.3.3. Media and Curriculum Implementation

In communication literature, quite a lot of instructional media are mentioned and their values explained. From the most primitive type of oral communication to the present technological era, a wide range of media have been designed and developed.

These include audio media like phonograph records (discrecording), audio tapes, audio cards, audio play backs, etc., visual media like print, models, maps, charts, cartoons, etc., and audio-visual media such as the television and videos.

Perhaps, the greatest development and diversification in media arises from the current rapid expansion of knowledge in many areas. As Brown and his associates (1964, pp.2-7) have clearly ellaborated, man is today discovering, classifying and recording new information at a phenomenal rate. Application of this new knowledge in medicine and chemistry, in space travel and atomic power, and in a dozen areas of technology are in evidence all arround us. As new knowledge is discovered and applied, new tools are developed; these in turn facilitate the discovery of still newer knowledge in a seemingly endless cycle.

No one can even faintly imagine an end to such disvovery, so, a problem of rpimary importance to teachers is keeping current with respect to new knowledge. In the process of doing this, they come to depend, more and more upon the use, production, and adoption of instructional media.

Another great challenge that exerts a similarly strong influence on the general pattern of instructional activities is the recent development of educational technology. This includes the expanding resources of instructional television, forms of transparency projection especially suited to large group presentations, language laboratories, programmed instructional devices and materials, and the like. Commenting on this trend, Finn (1962) has convincingly aaid;

> a new world -- seems to be forming within the educational society. This world is technological in nature. Men are seeking to solve some of the problems of education by technological means. Technology is not what many technically illiterate seem to think, a collection of gadegets, of hardware, of instrumentation. It is, instead, best described as a way of thinking about certaine classes of problems and their solutions (p. 29).

A close examination of the above statements of Finn informs us at least two important things. One is the need to appraise the wide range developments and innovations in instructional technology since these developments help the teacher in overcoming instructional problems arising in schools. A typical example could be the problems of teaching large classes in our schools; and these problems could, at least partially, be solved with the use of transparency projections. The other thing is the presence of a critique on those communication theorists who view instructional media like the television as handicapps to the creative abilities of the learners (accepting, what is presented on the television as it is). For example, Jerry Mander (1977), in his book Four arguments for the elimination of television, strongly warns communication planners by stressing that television is not reformable and that problems pertaining to television are inherent in the technology itself. Contrary to Mander's argument, Mcluhan (1964) expands the view that unlike other media, television is the most important media in dramatizing any material with many auditory and visual features (p.34). He further notes that television engages everyone, and to benefit more from such engagement, it is important that one has to be with it.

As a compromise between the different positions held by Mander and Mcluhan, Wilbur Schramm (1977) advances the view that early studies regarding the instructional value of one instructional media over another were made almost invariably without the aid either of satisfactory experimental design or of significant tests and more recent evidence has cast doubt upon them. No doubt, the presence of such varied opinions among communication theorists regarding the instructional value of one technological media over another has an immense help in promoting educational research. Nevertheless, it is worth noting that every technological media has its own importance depending upon the purpose for which it is used and depending upon the conditions under which it is used. For example, in a country like ours, where the educational infrastructure (schools, school equipment, facilities and supplies, and etc.) is meagre and, as Amare (1988) has noted, does not cope up with the increasing student population (pp.1-2), technological media like the radio, television, and transparency projections could play a paramount role in either supplementing or enriching instruction in the classroom, and hence, facilitate curriculum implementation. Hence, it may be safely stated that no media has an inherent weakness or could serve all purposes under all situations. Further, it is not the technology that has to be considered only, but the way the technology is used and the purpose for which it is applied should equally be given important consideration.

2.3.4. The why of Using Instructional Media

As Robert and associates (1985) have clearly explained, instructional media not only provide the necessary concrete experience but also help students integrate prior experience. An indepth look into these assertions could show a variety of ways and pufposes that instructional media could serve to facilitate teaching and learning.

Among the media used in instruction are the audio media. Like all media, audio media can be used in all phases of instruction from introduction of a topic to evaluation of the outcomes of instruction. As clearly discussed by Robert (pp.146-166), Brown (pp.163-210), Brown (1985, pp.passim) and a host of other educators and communication theorists, the most rapidly growing general use of audio media today is in the area of self-paced instruction and mastery learning. The slow student can go back and repeat segments of instruction as often as necessary. The accelerated student can skip a head or increase the pace of his or her instruction. Audio tapes can easily be prepared by teachers for specific instructional purposes. For example, in Chemistry, audio tapes can describe the steps in setting laboratory experimentation. Recordings of class presentations by the teacher can be used for student makeup and review. In Languages, students can practice spelling, vocabulary words recorded by the teacher on tape, multiplication tables, taking dictation or typing from a prerecorded tape, or pronunciation of a foreign language vocabulary.

A skillful teacher can use tape recorders to record information gleaned from a field trip. Upon return to the classroom, the teacher can play back the tape for discussion and review. Audio media also help in the recording of interviews with living witnesses of the recent or more distant past, thus making history to come alive. Audio materials can further be used for the evaluation of student attainment of lesson objectives. For example, oral questions may be prerecorded by the teacher a head of time and at the end of the lesson presentation, students can be made to listen and respond to the questions. This helps in promoting variety of lesson presentations. It could also help as a motivation technique.

Another media having a paramount importance in instruction are the visual materials. Under these category fall charts, cartoons, globs, tables (mathematical tables, periodic tables), and as Wilbur Schram (p.176) has urged us, textbooks, work books, films, television programmes, simulation games or something else which could supplement and or enrich the teachers teaching and the students learning. These media play a great role as either a supplementary media (those directly related to the curriculum) or as a media used for enrichment (those carrying major part of the responsibility of the teacher) in contributing new insights, new experience, variety or enjoyment. Obviously, there is no hard and fast line where supplement becomes enrichment or vice versa. But these two uses of media have been the most readily accepted by the teacher and most often experienced by the learners.

In addition to the above mentioned ones, reference books, periodicals, pamphlets, wallsheets (pictures, charts, diagram and posters), speciments, and models are worthy to mention. But, at this juncture, the importance of these visual aids still has to be defended for there are teachers who find the trouble and time taken to make them sufficient reasons for not using them. But, Farrant (p.296-297) advances the view that many experiments have been used to determine the effectiveness of lecturing as compared with teaching that involves visual presentations, and he further notes that, in every case, the use of visual aids has proved to be superior with respect to the amount the pupils remember, the depth of understanding, that results, and the enjoyment experienced.

The uses of audio-visual materials in teaching has another instructional value. Very often, they could be used as techniques for easing communication between the teacher and the students. For example, in information lessons the teacher may use the lecture method. In this case, the flow of information would necessarily be one way (Davis, 1981). In such a case, effective communication may not occurr between the teacher (the source of the information) and the students (the audience) since only the teacher is active and the students passive. But, if the lecture is aided by visual materials like charts, maps, diagrams and the like, students may be encouraged to participate and face-to-face interaction could be facilitated. As noted by Height (1968) such interaction results in effective communication involving both parties since the teacher is able to listen to the students point of view and is in a position to correct any misunderstanding.

Questions could be asked by either party and detailed explanations could be given to clarify technical points or areas of difficulty.

Eventually, the use of audio-visual aids in instruction is one of the important principles of modern teaching. Hence, instructional media can be used in a wide variety of teaching-learning situations depending upon the purpose they serve and the conditions they fit. They assist teachers as a technique for varying their approaches in teaching. They also help students in developing further insights in the material, topic, or a problem under study. However, it must be understood that everything depends upon the media the teacher has selected to aid his teaching and how he uses that media.

2.3.5. Methods and Techniques of Teaching

As defined by Gage (1976), teaching methods are recurrent instructional processes applicable to various subject matters and usable by more than one teacher (p.5), They are recurrent in that activities are repeated time and again over intervals measured in minutes. Methods of teaching are the different approaches the teacher uses and as Azeb (1984, pp.19-20) has currentely ellaborated, patterns of acts that serve to attain certain outcomes and guard against certain others and tactics used by the teacher to control instructional setting (physical and social) and to present the learning task, induce trial responses (follow up activities in the form of exercises or problems), correction of trial responses and evaluation of the outcomes of instruction. They are the media of executing the planned learning experiences and judging the outcomes of teaching and learning.

The methods of teaching range from the traditional lecture to the present innovative ones like computer assisted instruction, the project study method, laboratory demonstration, simulation method, the role play method, and the discussion method. In spite of the presence of these varied methods of teaching, the choice and use of one or more of them by the teacher depends on certain variables. The objectives of the lesson, the contents (the subject), the particular knowledge, skill or attitude to be developed, the size and nature of the group to be taught (students) and the skill and ability of the teacher in selecting and using the method are worthy to mention. It goes without saying, therefore, that the choice and use of any method of teaching must be based on taking the above variables into consideration. For example, when the aim is the passing on of information in large amounts to large number of students, lecture may be used. On the otherhand, when the purpose is to show a skill or how something is done, demonstration may be used. Further, when the aim is to make students participate to solve problems and explore issues together, discussion may be used. Still further, as clearly indicated by Jone (1968, p.457) independent study method could be used when the purpose is to enable the student learn as a result of his own effort.

It seems evident that there is no one best method of teaching that serves all purposes in all situations. Thus, a skillfull teacher, as noted by Farrant (p.170) structures his teaching by using a teaching method that is built on a foundation of knowledge already possessed by his pupils, that encourages

children to learn by doing and that ensures the attainment of the outcomes of teaching and learning more effectively. In addition, it is worth noting that all methods of teaching have their own merits and demerits. For example, the lecture method is helpful to present information gathered from various sources to large number of students. Nevertheless, it promotes passivity among the learners and also encourages one way flow of information. However, the use of appropriate instructional techniques can help to overcome the weaknesses of the lecture method.

Azeb (1984) has devoted the theme of her scholarly work regarding the improved application of the various methods of teaching with the use of appropriate instructional techniques so that the strong sides of the methods of teaching could be capitalized on. For example, She critically notes (pp.68-69) that short lectures must be followed by problems or questions for discussion, clear presentation of the objectives and contents of the lecture to direct the attention of students, the use of various approaches like illustrative stories, audio-visual materials, the use of an outline of the lecture on the chalk board, pausing before important names or statements, raising the voice and speaking more deliberately to give emphasis,and etc. Thus well organized material with good introduction, sympathetic and dynamic delivery of the lecture by the teacher, making proper adjustments according to the reaction of students, the use of appropriate eye contact with the class and the like, are important techniques for the improved application of the lecture method. As remarked by Perrot (1985) this helps to vary the

stimulus through focusing behaviour for gestural expressions and shifting movements from one corner to the other to intentionally focus the attention of the learners to the material being presented (pp.28-29). In such a case the instructional setting would be stimulating and attractive. Further, the teaching act would be meaningful. Commenting on this, Wallin and et. al. (1986) argue that "the thing that makes teaching meaningful and worthwhile is watching students learn and working with their wonder (p.421). Thus, the more the learner sees meaning and purpose in what he is learning, the greater is his chance of success. This is to mean nothing else than emphasizing the fact that the teacher should always be alert enough to use varied techniques in teaching so that instruction could be facilitated.

One of the most important instructional techniques that characterizes every teaching and learning act and any method of teaching is the questioning technique. Just like books, pens, and other audiovisual aids, questions are important tools of teaching and learning. Probably, in any effective instruction no technique of teaching is more widely used than questioning. Bellack, et. al. (1966) is reported to have indicated that "the core of the teaching sequence in classroom is a teacher's reaction to that response" (Perrot, p.41). Hence, questions steer the direction of the learning task.

The most frequent uses of questioning have been as a testing device, as a means of getting feedback, as a device for introducing, reviewing and summarizing lessons. Davis (1981) seems to endorse these statements when he lists four major functions of questions as:

·Motivating trainees by getting their interest and attention.
·Promoting mental activity involving trainees as partners in the instructional process and
·obtaining feed back on the trainees ability to recall, understand, and apply what they have learned (p.163).

Despite the ample roles that questions can play in facilitating interaction in the classroom, the style of phrasing them is a crucial factor to be considered. Taba (1967) asserts that the teacher's manner of asking questions is by far the most influential single teaching act (p.273). Davis confirms this statement of Taba by noting that questions should be simply worded to be understood, well defined, reasonable to promote fairness, relevant to the topic under study and demanding for responses within the reach of the learners (p.166). If these assertions are not given due consideration in framing questions, the learner may not be able to give more complete and thoughtfull responses.

Another matter of due concern in the questioning technique is the need to apuse (giving longer wait times) for better responses to questions. In this connection, Marry and his associates (1977) have empirically shown that with longer wait times students will get enough time to collect their thoughts and to make conclusions about what they have observed. Hence, when enough time is given for questions (possibly one to two minutes depending on the level of difficulty of the questions), the speech base is more shared by the class and a pattern of conversation participating all students will come to the move and, therefore, satisfaction and motivation by the group. This can

help as a basic model to increase students' power of enquiry. Thus, it is the responsibility of teachers, irrespective of their qualification, to ask well phrased and thought provoking questions at almost all levels of teaching and learning sequence and this marks the quality of their performances.

Corrolary to the principle of modern teaching which states that the teacher must know a variety of methods and the particular learning outcomes which each method helps to bring about, Skinner notes that "to acquire behaviour the student must engage in behaviour"(1961),p.389). This statement by Skinner is a restatement of the educational principle that most significant learning is acquired through actual doing. This is nothing more than emphasizing the interactive role of teaching-learning processes in curriculum implementation.

In fact, teaching and learning activities may be sighted in the text books. But they may be inadequate or may not fit the local situations. This implies that, other than those indicated in the curriculum plan, depending on circumstances, teachers are required to organize a wide range of learning activities for students so that they could practice the required skills, knowledge, and attitudes. In support of this view, Wigginton(1980) warns by saying "if a text book is trying to say a point, establish a concept, or teach a skill in any subject, it can not do so unless the point, the concept or skill can be illustrated for the student through various activities"(p.30). Such activities, other than tests and drills include projects, subject matter clubs and

seminars such as science or mathematics and occassional student publications, field trips, projects and committee work and the like. The value of these activities is so great that they deepen pupils' interest and knowledge of the subject in concern.

2.3.6. Resources and Curriculum Implemention

A plan for an educational programme can not be fully implemented in the absence of resources. Resources could be financial, material, or human. Irrespective of the type, resources help the teacher to facilitate the planning of instruction and the choice and organization of teaching and learning activities. As has been described earlier, activities like laboratory demonstrations, group or individual tasks for the learners, resource visitors, excursions and field trips, reading assignments, and a host of others can best be carried out when resources are adequately available. Thus, resources like laboratory and laboratory equipment, supplies and laboratory chemicals, additional teaching and learning materials like reference materials, journals, pamphlets, facilities like transporation, Cinema Halls, and resource persons like guest speakers need to be carefully identified, selected, and organized by the teacher ahead of time. However, the extent to which these materials are adequately available determines their wise use in instruction, and limit the degree to which the curriculum plan could be implemented. In line with this, Ohles stresses that "whether the classroom has ready access to instructional resources or must depend on distant sources affects both planning for instruction and the actual teaching" (1970, p.183). Hence the teacher is required to know

ahead of time whether these facilities and respurces are available, adequate, and accessible in the school. If otherwise, he is required to plan for a substitute.

One of the best substitutes could be the teacher's own effort to produce them. The other alternative is to seek ways and means by which these materials could be acquired from the surrounding community. In support of this, Olsen and associates (1954) say that:

> if you want your teaching to be really vital, stimulating, and useful you will have to plan for curricular use of various community resources in any teaching field and in nearly every unit of work (p.42).

To use community resources, the teacher needs to have a skill in creating good community relations. To create good relationships with the community, a teacher has to participate in community activities. This is another responsibility that teachers should bear. This is because of the fact that teachers themselves as members of the community are required to involve, as Rosen (1971) has advocated, "in various activities which the state has determined as socially useful"(p.11).

The participation of teachers in community life can be seen from two angles. In the first place, participation is a matter of citizenship. Teachers as citizens should serve the community in which they live. They must give leadership or work with those who lead. It is also their civic responsibility to be a member of a political pary-to vote, and to hold officies. This is because, say Morris and others (1963), "teachers are among the best educated mememberes of the social group" (p.24).

They posses social insight, organizational experience, and human relation skills needed in leadership situations. This distinguishes them from ordinary men in the society and calls them for community participation. In the second place, teachers are required to participate in the community to know and use community resources in instruction. Depending on the location of schools (rural, urban, suburb) such facilities as public libraries, Movies and movie halls, projectors and projected materials and others may be insufficiently available in schools but might be acquired from the community to the advantage of facilitating instruction.

At the other end, the participation of teachers in community activities promotes the school community relations. The presence of such school community relations could make the community itself as a classroom where many lessons could be conducted outside the school in places where community life is in full swing. For example, as noted by Farrant (pp.250-252) members of the community may even participate in teaching such things as local crafts, music, dance, history, and government. There may also be cooperation with agricultural extension workers, with dommunity development workers and with anyone in the community who holds a similar position. Further, teachers may welcome parents into the classroom as teacher aids so as to utilize the skills and energy of those who have the greatest vested interest in the pupils. In such a case "parents became valuable learning resources" (John & Joanne, 1985, p.342). Parents may make accasional visites to schools and talk to teachers about their childrens' work. This

ensures that the parents get an accurate idea of how their children are getting on and it helps the teacher to clear up with parents any misunderstandings there might be. Such visits are much more profitable than report cards sent home with pupils telling in shorthand language how their children have done. Still further, parents could also support the school in practical ways such as fund raising for teaching equipment or helping to carry out building repairres and improvements. Hence, the presence of good relationships between teachers and the community will make for a much better relationship between the school and the community and result in much more efficient use of community resources, and it is a skillfull teacher who can benefit from such relationships.

2.3.7. Diagnosis of Students' Conditions and Curriculum Implementation

Teaching must not overlook the concerns of the learners. It should consider the deep felt feelings and emotions, anxieties and un easiness the learners have about themselves and others. The materials presented should either be within the learners releam of knowledge and experiences or it should be easily connected with it. This promotes relevance and "relevance is achieved by making what is being taught germane to the childs knowledge and experience" (Hass, 1971, pp.564-565). This can be possible only when the teacher undertakes much diagnostic activities in the course of the instruction process to facilitate the implementation of the planned programme.

Diagnosis of students' conditions is a particularly important aspect of teachers' instructional responsibility in implementing the curriculum. This is because, not all topics that must be considered in school courses are framed in away they correspond to the interests and physical conditions of the learners. It is likely that some students may have hearing, vision, or other physical problems that influence their ability to profit from certain kinds of instruction. Others might have failed to acquire knowledge that the teacher mistakenly has assumed all class members to have. Still others may lack previous experience that help as a basis for present learning. For example, as Restler (1964) has clearly indicated, in a cummulative course like mathematics, the learner must master one stage of instruction before he can learn the next, . . . if the student misses any point he has zero probability of learning any successive points (pp.124-125). This is to mean that among other things, students level of physical, psychological, and intellectual maturity, that is the learners developmental level and students knowledge of the area in which instruction must proceed need to be clearly identified through teachers diagnostic activities. Farrant seems to endorse this argument by saying efficient teaching in school demands from the teacher a sound knowledge of all that pupils must know, together with an ability to relate the content, methods, sequence and pace of his work to the individual needs of his pupils(pp.170-171). He further remarks that by giving careful consideration to such issues, and by supplementing direct teaching with indirect support, the teacher can achieve a total effect that can have dramatic results and can be extremely enjoyable for his pupils.

Teachers diagnostic activities also help to know something about students cultural background, motivational patterns, and the content of their social learning such as the particular meanings they bring to school, their particular approachs to learning tasks, and the expectations they have of themselves and of others. Existing differences in mental systems and the students understanding of common concepts and symbols need to be carefully identified in choosing an approach to learning task, in deciding what materials to use, in selecting learning experiences with which to develop the basic ideas and the type of incentives used to generate learning. A survey of the problems and prospects that students have in learning could suggests needed modifications in pacing learning as well as the organization of learning experiences. Taba (1962) has explicitely described the diagnostic function of teachers and the importance of such aspects of teachers act in a more convincing way (pp.235-237).

In extent to which the intended changes in the behaviour of the learners is achieved depends in part upon the conformity between the official curriculum provided in schools and the unofficial or the hidden curriculum characterizing the learners. These include social class distnictions emanating from the economic background of students, cliques, favoratism, rejection, and discriminations generating from a sense of belongingness to a given locality or community and blood relationships. These aspects of the hidden curriculum determine the structure of interpersonal relations, the atmosphere or the classroom climate, and the group values which control both. Milurn and his colleague (1978) have reported that:

> personal interaction skills like helping, sharing, smiling, greeting others, and task related skills like attending, speaking posetively about academic materials, compliance with teacher requests and remaining on task (p.135).

are among the influences exerted by the hidden curriculum in classroom teaching and learning. In addition, students activities and experience on sundays, holydays, and other out of school experience could greatly influence teaching and learning activities. Thus, the teacher is required to carry out careful diagnostic activities to clearly identify these unofficial curriculums with the view to adapt them to the official curriculum provided in schools. This could best be done through observations, preparing diaries, questionaire, and interviewing students so that adequate information could be obtained. If otherwise, the official curriculum may be negatively influenced, that is, students may not duely attend schools, help each other, may consistently miss classes and may not complete group or individual tasks as required.

Eventually, teaching skills alone are not enough. But, a teacher should know about his students and how they learn. He must be able to recognise those characteristics that are of significance in helping each student to learn more effectively. The teacher must make himself available to students. He must be on call and ready to seize the moment the student is ready to learn or know. A skillful teacher knows his importance in the classroom and understands that it is his vital relationship with the learners that is at the heart of the educational enterprise.

III. REPORT, ANALYSIS, AND INTERPRETATION OF DATA

This section of the study is concerned with the report, analysis and interpretation of the data collected through questionaire, observations and interviews. The same type of questionaire, observation checklists and interview guides were used in all the three senior secondary schools (Jimma, Bedelle, and Mettu). A total of 138 questionaire were distributed to the three senior secondary schools (48, 45 and 45 respectively). From the total of 138 questionaire 134 (97%) have been filed out (see table 1). Hence, since more than 75% of the questionaire had been responded to, they were considered for analysis and interpretations.

T A B L E 1

STATISTICAL SUMMARY OF RESPONDENTS

Name of the school	Number of copies of questionare returned		Number of copies of questionaire not returned		Total number of questionaire distributed
(a) Jimma S.S.S	46	33%	2	1%	48
(b) Bedelle S.S.S	44	32%	1	1%	45
(c) Mettu S.S.S	44	32%	1	1%	45
T O T A L	134	97%	4	3%	138

Though the highest percentage of the questionaire have been returned (97%), table 1 indicates that a few number of teachers did not return the questionaire as required. The reason why some teachers do not respond to questionaire is a serious matter which seeks special research studies since such teachers could be one of the obstacles to educational research.

TABLE 2

BACKGROUND INFORMATION OF THE RESPONDENTS

SEX														
Grade / Sex	(a) Jimma				(b) Bedelle				(c) Mettu				Total	%
	9	10	11	12	9	10	11	12	9	10	11	12		
Male	12	10	12	11	12	11	12	8	12	11	12	9	132	98.5
Femal	1	-	-	1	1	-	-	-	-	-	-	-	2	1.5
Total	13	10	11	11	13	11	12	8	12	11	12	9	134	100

AGE				
Name of the School	19.5-29.5 years	29.5-39.5 years	40 years and above	Total
(a) Jimma	11	34	1	46
(b) Bedelle	20	24	-	44
(c) Mettu	13	31	-	44
Total	44(33%)	89(66%)	1	134(100

SERVICE				
Name of the School	1 - 9.5 years	10 - 19.5 years	20 years and above	Total
(a) Jimma	25	20	1	46
(b) Bedelle	28	16	-	44
(c) Mettu	33	11	-	44
Total	86(64%)	47(35%)	1	134

QUALIFICATION														
Grade / Qualific.	(a) Jimma				(b) Bedelle				(c) Mettu				Total	%
	9	10	11	12	9	10	11	12	9	10	11	12		
(a) Degree	2	1	12	10	-	3	10	8	1	2	12	9	70	52
(b) Diploma	9	9	-	1	12	7	-	-	9	9	-	8	56	42
(c) Certificate	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(d) No response	2	-	-	-	1	1	2	-	2	-	-	-	8	6
Total	13	10	12	11	13	11	12	8	12	11	12	9	134	100

SUBJECT AND GRADE LEVEL TAUGHT													
Grade / Subjects	(a) Jimma				(b) Bedelle				(c) Mettu				Total
	9	10	11	12	9	10	11	12	9	10	11	12	
Amharic	2	1	2	1	2	1	2	1	2	1	1	1	17
English	2	1	2	2	3	2	2	1	2	2	2	1	22
Maths.	2	2	2	2	3	2	2	1	2	2	3	2	25
Chem.	1	1	1	2	1	1	1	1	1	1	2	1	14
Physics	1	1	2	1	1	1	1	1	1	1	1	1	13
Biology	2	2	1	1	1	1	2	1	1	1	1	1	15
Geography	2	1	1	1	1	2	1	1	1	1	1	1	14
History	1	1	1	1	1	1	1	1	2	2	1	1	14
Total	13	10	12	11	13	11	12	8	12	11	12	9	134

A total of 72 classroom observations were made in the three senior secondary schools, that is, 24 observations each (see Table 18, 19 and 20). Data were collected using observation checklists (see Appendix F) to find out whether or not teachers of the academic subjects in the three schools differ in their use of appropriate instructional techniques to facilitate curriculum implementation. The data collected through observations were analyzed using: (1) the Chi-Square test (X^2) so that the data collected from different categories of teachers (grade 9, 10 and grade 11 teachers of the three schools) entailing frequencies of responses could be combined to indicate the existing difference and (2) interpretations in relation to what authorities in the field of curriculum and instruction have established. To substantiate the data collected through questionaire and observations directors, teachers and students were (randomly) interviewed. The data collected through interviews were analyzed in relation to literature in the field of curriculum and instruction.

As table 2 (under the section sex) indicates almost all the teachers of the academic subjects in the three schools are males (98.5%) and only two of the total respondents were females. The respondents also differ in their age. For example, one of the teachers in Jimma was 40 years old (see table 2-Age) and he was found to be the oldest among the respondents. The youngest teacher was 28 years old. The respondents still differed in their year of service. There was a teacher with 20 years of teaching

service while a teacher with the least service had a teaching experience of 7 years. Even then, the average teaching experience of teachers of the academic subjects was not less than 5 years. This implies that teachers of the academic subject in the three schools had less initial problems of adjustment to class room teaching than begining teachers. Furthermore, the respondents also vary in their qualification (academic certification acquired after completing a certain level of education). 52% of the teachers have their first degree where as 42% were diploma holders (see tale 2 - qualifiaction). It appears, therefore, that the highest percentage of teachers of the academic subjects in the three schools (94%) have a legal sanction which signifies their professional and academic competencies to teach in senior secondary schools. However, 6% of the respondents were not willing to write down their qualification. This category of respondents might either be those teachers who have discontinued their college studies (after 1st year, 2nd year, etc.) for some reasons or those who still participate in the continuing education programme carried out during the summer seasons in various colleges of the country.

According to table 2 the assignment of teachers to the various grade levels seems to follow the qualification of teachers. For example, out of the total of 70 teachers who have their first degree 61 (87%) were assigned to teach in grades 11 and grade 12 of the three schools where as only 9 teachers (13%) taught in grades 9 and 10. - In addition, from the total of 56

teachers who hold diploma the 56 (42%) were consistently assigned to teach in grades 9 and 10. Such an effort in assigning teachers to the various grade levels on the basis of their academic competencies seems to be plausible since it helps to meet the curricular requirements of the academic subjects (the increase in the level of difficulty of concepts and ideas requiring breadth and depth of vision and understanding on the part of teachers) from one grade level to the other.

3.1. Report, Analysis and Interpretations of Data Collected through Questionnaire

As has been indicated earlier the same type of questionaire have been administered to all the teachers of the academic subjects in the three senior secondary schools. Hence, the first general question presented to all the teachers states as follows: "Do you use planning to facilitate classroom instruction?" The responses given to this question were very clear as indicated in table 3.

T A B L E 3

WHETHER OR NOT TEACHERS USE PLANNING

Name of the School	Response				No Response		Total	
	Yes		No		No.	%	No.	%
	No.	%	No.	%				
(a) Jimma	40	30	2	1	4	3	46	34
(b) Bedelle	35	26	3	2	6	5	44	33
(c) Mettu	38	28	5	4	1	1	44	33
Total	113	84	10	7	11	9	134	100

Note: Figures were rounded to the nearst whole number.

According to the data in table 3 the majority of the respondents (84%) have indicated that they use planning whereas a few number of teachers (7%) have indicated that they do not use planning. In fact 11 Teachers (9%) did not respond to this general question. On the otherhand, out of 134 respondents 126 teachers (94%) have indicated that (see table 2: Qualification) they have completed college studies (Degree and Diplom holders) and as any one could imagine, instructional courses (instructional planning, teaching methods, etc.) are given to all college students who are the would be teachers by the Faculty of Education of Addis Ababa University and by other similar colleges in this country. Thus, there seems to be a paradox when some teachers, having taken instructional planning and its importance during their training programmes in colleges, hesitated to indicate that they use planning to facilitate instruction. Nevertheless, the data in table 3 indicates that the majority of teachers of the academic subjects use planning to facilitate curriculum implementation.

The second item of the questionaire relating to planning was presented to teachers as follows: "To which of the following instructional plans do you give emphasis in the subject you are teaching; to a yearly plan, semester plan, daily lesson plan, or to all?(table 4).

TABLE 4

THE TYPE OF PLANNING USED BY TEACHERS

Instructional Plans	Jimma	Bedelle	Mettu	Total	%
a) Yearly plan	5	3	3	11	8
b) Semester plan	5	2	5	12	9
c) Daily lesson plan	3	10	4	17	13
d) All (a,b and c)	30	25	28	83	62
e) No response	3	4	4	11	8
Total	46	44	44	134	100

Table 4 clearly shows that from the 123 who responded the majority (62%) have indicated that the yearly plan, the smester plan, and the daily lesson plan were duely used. In addition, other than the 8% who did not respond, there seem to exist a considerable number of teachers who use either the yearly plan, the semester plan or the daily lesson plan only (8%, 9%, and 13% respectively). These category of teachers, when taken together seem to be significant. Thus, one may safely state that teachers of the academic subjects in the three schools use all types of instructional planning depending on circumstances, that is, preparing the yearly plan in which the major areas of study are indicated to help as a reference for them, using the semester plan which incorporates a series of weekly or monthly activities unified under a topic or theme, and preparing daily lessons which help the teacher to carefully decide ahead of time what he is going to teach and how he is going to teach it during the given time period.

TABLE 5

THE CORRESPONDENCE OF CURRICULAR OBJECTIVES WITH OTHER COMPONENTS

Item	Jimma (a) 3	(b) 2	(c) 1	Score	$\bar{X}$	N.R	Bedelle (a) 3	(b) 2	(c) 1	Score	$\bar{X}$	N.R	Mettu (a) 3	(b) 2	(c) 1	Score	$\bar{X}$	N.
(a) Correspondence between the curriculular objectives and contents	9	21	8	77	2	88	4	29	6	76	1.9	5	5	25	7	72	1.9	7
(b) Its degree of incorporating the behavior component	5	15	10	55	1.83	16	7	30	4	85	2.07	3	17	20	25	93	1.38	5
(c) The extent to which it incorporates the content component	11	20	6	79	2.13	9	12	15	9	75	2.08	8	13	19	6	83	2.18	6
(d) Clarity of objectives	8	17	7	65	2.03	14	13	20	11	90	2	0	11	18	7	76	2.1	8
					Sum= 7.99						Sum= 8.05						Sum= 8.56	
					Grand mean= $\bar{\bar{X}} = \frac{7.99}{4}$						Grand mean= $\bar{\bar{X}} = \frac{8.05}{4}$						Grand mean = $\bar{\bar{X}} = \frac{8.56}{4}$	
					$\bar{\bar{X}} = \frac{1.99}{}$						$\bar{\bar{X}} = \frac{2}{}$						$\bar{\bar{X}} = \frac{2.14}{}$	

KEY

1. a= 3 ⟹ high
2. b= 2 ⟹ moderate
3. c= 1 ⟹ low
4. Score (teachers of Jimma under a,b, & c)
   = (3x9)+(21x2)+(8x1)= 27+42+8

   Score= 77

5. $\bar{X}$= mean = $\frac{77}{9+21+8} = \frac{2}{}$

6. $\bar{X}$ = grand mean = $\frac{\sum_{i=1}^{4} \bar{X}_i}{4} = \frac{7.99}{4} = \frac{1.99}{}$

7. N.R= no response

In planning instruction, it is obvfous that the teacher should clearly chart the broad curriculum objectives into specific learning objectives so that they could be attainable step by step in the course of the instruction process. As has been indicated earlier in the preceding sections of this paper, the extent to which the curricular objectives correspond with the instructional content components, and their clarity may determine the teacher's efforts in clearly charting the instructional objectives when planning instruction. Thus teachers were asked to rate the conditions of the curricular objectives of their respective subjects as indicated in table 5. In this case all teachers in the three schools were expected to show their rating againist the 4 items listed from "a" to "d".

The data on table 5 was analyzed using averages so that the tendency of the respondents to the correspondence of curricular objectives with other components (on the average) could be identified. Consequently, a weight of 3,2, and 1 were given to the ratings high, moderate, and low respectively. In order to analyze the data collected from the three senior secondary schools the following criteria of analysis have been established.

1. If the mean ranges from 0.5 to 1.4 the rating low was considered.
2. When the mean ranges from 1.5 to 2.4 the rating mederate was considered.
3. For the mean ranging from 2.5 to 3 the bating high was used for analysis.

As table 5 indicates, the mean of the responses given by teachers of the academic subjects in the three senior secondary

schools consistently ranges from 1.5 to 2.4. In addition, the overall mean (grand mean) also consistenly fall in the same range (1.99 in Jimma, 2.0 in Bedelle, and 1.99 in the case of Mettu). On the other hand, a close look into the table clearly shows that some teachers of the three senior secondary schools did not respond to the four items (item a through d), For example, 8, 16 and 9 teachers from Jimma did not respond to item(a), item (b), and item (d) respectively. It could be implied from this that these teachers were either not interested to respond or lack the necessary competence to understand the objective-content relation charqcterizing the curriculum of their respective subjects. Nevertheless, these category of teachers, when compared to the rest of the respondents of the three senior secondary schools, seem to be less in number, and hence insignificant. Thus, as the averages of the data on the table indicate, the conditions of the curricular objectives of the academic subjects as they relate to the contents, the behaviour-content component, and clarity are found to be moderate. However, it may be argued that the moderate condition of the curricular objectives of the academic subjects could also mean that in some subjects the objective-content relations, clarity and the like are high and in others low.

In particular, when there is a low state of affaire as regards the curricular objectives of the academic subjects there is a great need for teachers to combat the problem using different mechanisms so that the implementation of the curriculum could be facilitated. Consequently, teachers were asked to write

down the ways and means (question 4) they use in this regard. Thus, a considerable number of teachers have indicated that they overcome the problem, at least partially, through further reading and demanding the curriculum authorities to take corrective actions as necessary.

The other item of the questionair was concerned with the organization of contents. Respondents were asked to indicate if contents of the subjects they teach were organized: (a) vertically (b) horizontally, and(c) both a and b. The responses to this question are presented in table 6.

TABLE 6

CONTENT ORGANIZATION OF THE ACADEMIC SUBJECTS

Content Organization	Jimma	Bedelle	Mettu	Total	%
a) vertical	20	17	16	53	40
b) horizontal	6	6	15	27	20
c) a and b	10	19	10	39	29
d) No response	10	2	3	15	11
Total	46	44	44	134	100

Reference to table 6 shows that 40% of teachers from the three schools have responded by saying that the contents of the academic subjects are organized vertically. In addition, a considerable number of respondents (29%) have also indicated that the contents are organized both vertically and horizontally. Further, as the table clearly shows, the number of teachers who have indicated the horizontal organization of contents of the

academic subjects are also considerable (20%). In such a state of varied views broad generalization may be hard, but one could safely state that some of the contents of the academic subjects are vertically organized and the others horizontally organized. This condition, as any one could imagine, calls for teachers efforts so that mederate organization of contents (both vertical and horizontal) could be maintained. Hence, teachers were asked to indicate the provisions they make to promote a balanced organization of contents in their respective subjects. This is shown in table 7.

T A B L E 7

PROVISIONS BY TEACHERS FOR CONTENT ORGANIZATION

Provisions by Teachers	Jimma	Bedelle	Mettu	Total	%
a) Enriching the contents through further reading	17	19	22	58	43
b) Consulting resource people for assistance	19	4	9	32	24
c) Jumping the contents with poor organization	5	12	3	20	15
d) No response	5	9	10	24	18
Total	46	44	44	134	100

According to the data in table 7, 43% of the respondents have clearly indicated that they maintain the content organization of the subjects they teach through further reading. Further, 24% of the respondents have indicated that they promote the content

organization by consulting resource people-possibly their colleagues who teach related subjects in the school. There are also teachers who exclude contents with poor organization. These category of teachers seem to be either those who lack good academic competence in the subject they are teaching or those who lack the necessary teaching experience in academic subjects. Nevertheless, the important thing to be noted from the data in table 7 is that teachers of the academic subjects seem to show a satisfactory performance to maintain the content organization of their respective subjects.

Another very important factor which could help teachers to facilitate curriculum implementation is the availability of teaching-learning materials. Thus teachers in the three schools were asked to rate (item 7) the conditions of teaching-learning materials in their schools. Consequently, a weitght of 2,1, and 0 have been given to the options adequately available, moderately available, and not available respectively, So that averages could be used for analysis. Further, the following criteria of analysis have been used:

1. for the mean ranging from 0 to 1.5, the option not available was considered.
2. if the mean ranges from 0.51 to 1.5, the rating moderately available was used for analysis, and
3. when the mean ranges from 1.51 to 2 the rating adequately available was considered. This is clearly presented in table 8.

T A B L E 8

CONDITIONS OF TEACHING - LEARING MATERIALS

IN THE THREE SCHOOLS

	Teaching-learning Materials	Jimma S.S.S.						Bedelle S.S.S.						Mettu S.S.S.					
		(a) 2	(b) 1	(c) 0	Score	$\bar{X}$	N.R	(a) 2	(b) 1	(c) 0	Score	$\bar{X}$	N.R	(a) 2	(b) 1	(c) 0	Score	$\bar{X}$	N.R
1.	Student texts	10	10	19	30	0.77	7	11	28	2	50	0.96	3	16	12	8	44	1.22	8
2	Teachers' guides	8	12	23	28	0.65	3	15	9	7	39	1.25	13	8	14	12	30	0.68	10
3	Reference Books	2	23	8	27	0.82	13	12	27	5	51	1.15	0	2	22	14	26	0.68	6
4	Journals	0	5	31	5	0.12	10	2	8	23	12	0.36	11	0	14	20	14	0.41	10
5	Pamphlets	0	2	28	2	0.07	16	1	3	27	5	0.16	13	0	12	22	12	0.35	10
6	Monographs	0	6	30	6	0.17	10	4	7	30	15	0.36	3	0	14	24	14	0.36	6
7	Charts	5	8	29	18	0.43	4	3	5	33	11	0.26	3	4	14	16	22	0.64	10
8	Graphs	3	13	25	19	0.46	5	5	7	24	17	0.47	8	2	10	20	14	0.43	12
9	Maps	4	18	12	26	0.76	12	1	6	28	8	0.22	9	6	12	20	24	0.63	6
10	Models	2	15	26	19	0.44	3	3	1	34	7	0.10	8	0	16	18	16	0.47	10
11	Cartoons	7	22	15	36	0.82	2	0	2	41	2	0.04	1	0	18	26	8	0.23	10
12	Real objects	3	15	20	21	0.55	8	0	3	37	3	0.07	4	0	17	22	17	0.93	5
13	Laboratory equipments	5	35	2	45	1.07	4	0	4	31	4	0.11	9	0	17	18	17	0.48	9
14	Laboratory Chemicals and supplies	6	11	23	23	0.57	6	0	2	36	2	0.05	6	0	14	22	14	0.38	10
15	Projecters	0	0	38	0	0	8	0	3	33	3	0.08	8	0	6	26	6	0.18	
16	Films	0	0	35	0	0	11	0	2	29	2	0.06	13	2	4	25	8	0.25	13
17	Slides	0	0	37	0	0	9	0	1	39	1	0.02	4	2	3	27	7	0.21	12
18	Recorders	0	0	31	0	0	15	0	2	32	2	0.05	10	0	4	22	4	0.15	18
						Sum= 7.71						Sum= 5.86						Sum= 8.18	

Grand mean= $\bar{X}$ = $\frac{7.71}{18}$ $\bar{X}$ = 0.43

Grand mean= $\bar{X}$ = $\frac{5.86}{18}$ $\bar{X}$ = 0.32

Grand mean= $\bar{X}$ = $\frac{8.18}{18}$ $\bar{X}$ = 0.45

K E Y

(i) a=2 ⇒ Adequately Available

(ii) b=1 ⇒ moderately available

(iii) c=0 ⇒ not available

(iv) Score, example student texts in Jimma

score= (2x10)+(1x10)+(0x19)

= 20 + 10 + 0

Score= 30

(v) $\bar{X}$ = mean = $\frac{30}{10+10+19}$ = 30/39 $\bar{X}$ = 0.77

(vi) $\bar{X}$ = Grand mean = $\frac{7.71}{18}$ $\bar{X}$ = 0.43

(vii) N.R = no response

Table 8 presents the mean scores of the respondents regarding the conditions of teaching-learning materials in the three schools. Reference to the table shows that the grand mean of the responses from the three schools consistently fall within the ranges 0 and 0.5. However, there are some exceptions which the table indicates. For example, the mean scores of student texts, teachers guides and reference books range from 0.50 to 1.5 in the three schools respectively. This could to some extent reveal the fact that these materials are the basic tools of instruction and hence, are made available in all schools by the concerned authorities. Even then, the distribution of these materials seem to be uneven. For example, student texts and teachers guides seem to be more available in Bedelle and Mettu (0.96, 1.25, and 1.22, 0.68 respectively than in Jimma (0.77, 0.65). This could be due to the fact that there exists a high rate of attrition in rural schools like Mettu and Bedelle during harvesting seasons and, thus, make the ratio of teaching materials to student population moderately high, where as urban schools like Jimma tend to retain high student population, and therefore, maintain less ratio of teaching materials to students. There are also exceptions regarding maps, cartoons and laboratory equipments and supplies in Jimma as compared to Bedelle and Mettu. There seem to exist more maps, cartoons, laboratory equipments and supplies in Jimma senior secondary school than in Bedelle and Mettu - possibily due to the relative proximity of Jimma to the center (Addis Ababa) and therefore, the accessibility of these materials for prompt acquisition when necessary. Nevertheless, such exceptional cases may not be

representative for generalizations. Rather, the grand mean of the scores of the three schools could give the whole picture (on the average) regarding the conditions of teaching-learning materials in the three schools. Consequently, the overall mean (grand mean) in Jimma, Bedelle, and Mettu, as shown in the table, were 0.43, 0.32, and 0.45 respectively, and thus, fall within the range 0 to 0.5. This implies that teaching-learning materials, on the average, seem to be consistently low in the three senior secondary schools.

The meagre nature of teaching-learning materials in schools, as any one could imagine, calls for teachers continued efforts to design systematically the mechanisms by which shortage of these materials could be minimized. This, as Johnson's model suggests, constitutes one among the teaching reportoires that should characterize the work of teachers. In this connection, respondents (those who indicated the non availability of teaching learning materials in their schools) were asked to indicate (item 8) the ways they use to acquire teaching-learning materials to facilitate instruction in the subjects they teach. This is presented in table 9. However, for the sake of analysis, the grand total of the responses from teachers of the three schools (vertical summation) is immediately shown in table 10. Normally percentages have been used for analysis but the calculation of percentages is taken not in relation to the number of teachers in each of the three schools but in relation to the number of responses from each of the three schools since a single teacher responds to 18 number of items.

TABLE 9

WAYS USED BY TEACHERS TO ACQUIRE TEACHING-LEARNING MATERIALS TO FACILITATE INSTRUCTION

Teaching-Learning Materials	Jimma				Bedelle				Mettu			
	(a) produce oneself	(b) insist the school to purchase	(c) seek for a substitute	(d) no response	(a) produce oneself	(b) insist the school to purchase	(c) seek for a substitute	(d) no response	(a) produce oneself	(b) insist the school to purchase	(c) seek for substitute	(d) no response
1. Student texts	0	15	2	2	0	2	0	0	0	5	2	1
2. Teachers guide	0	20	3	0	0	4	3	0	0	10	2	0
3. Reference Books	0	25	2	1	0	2	2	1	0	3	3	3
4. Journals	0	20	7	4	0	20	3	0	0	12	5	3
5. Pamphlets	0	17	8	3	0	20	3	4	2	20	0	0
6. Monographs	0	11	17	2	0	20	4	6	5	13	4	2
7. Charts	15	10	3	1	15	13	5	0	4	8	2	2
8. Graphs	11	10	2	2	2	10	12	0	5	12	2	1
9. Maps	5	2	3	2	12	11	4	1	4	10	6	0
10. Models	2	11	10	3	8	19	3	4	2	11	2	3
11. Cartoons	5	7	2	1	6	21	7	7	17	7	2	0
12. Real objects	3	10	5	2	14	10	8	5	18	2	2	0
13. Laboratory equipment	0	1	0	1	0	23	4	4	1	10	6	1
14. Lab. chem. and supplies.	0	13	8	2	0	30	2	4	0	20	2	0
15. Projectors	0	33	3	2	0	29	3	1	0	21	4	1
16. Films	0	30	2	3	0	16	12	1	0	19	6	0
17. Slides	0	27	8	2	0	33	4	2	0	20	3	4
18. Recorders	0	21	7	3	0	22	8	2	0	12	7	3
Total	41	273	92	36	57	305	87	42	58	215	64	24

TABLE 10

GRAND SUMMARY OF THE RESPONSES OF THE THREE SCHOOL LEVELS
(Vertical Summation of Table 9)

	Jimma	Bedelle	Mettu	Total	%
a) Produce oneself	41	57	58	156	12
b) Insist the school to purchase	273	305	215	793	61.3
c) Seek for a substitute	92	87	64	243	18.8
d) No response	36	42	24	102	7.9
Total	442	491	361	1294	100

Table 10 presents the grand summary of the responses of the respondents from the three school levels. Accordingly, the data in the table indicates that the majority of teachers from the three schools (61.3%) depend on their schools for the necessary teaching-learning materials to implement the curriculum. In fact, teaching-learning materials like student texts and teachers' guides are officially prepared by the curriculum authorities and distributed to schools, and therefore, may not be totally prepared by teachers since they are official documents. In like manner, materials like projectors, slides and recorders can not be produced by teachers since they are sophisticated and require expertise knowledge. In such cases, teachers are forced to depend on their schools. However, materials like charts, graphs, maps, models,and cartoons could be prepared by teachers from locally available materials. The curriculum guide strongly stresses this. For instance, the curriculum guide for mathematics (p.49) indicates that "wood protractors, set squares, symetry board, graphs made of template of standard parabola" must be prepared by

teachers and students from locall materials. In addition, the Geography curriculum guide demands teachers and students to prepare "simple sketch maps, reliefs and contour maps, regional divisions of countries and collecting real objects like the different types of rocks and soils (pp.13-20) to aid instruction in geography. Still further, the physics curriculum guide recommends the use of local materials such as the magnifying glass, preparing an electoscope from aluminium foil, and measuring distances using strings so that instruction in physics could be facilitated (pp.5-10). Similar hints for preparing teaching-learning materils from locally available resources were given in the other curriculum guides. (See secondary school curriculum guides for chemistry, biology, languages, pp. passim). However, only very few teachers (12%) of the three school levels seem to show an attempt to produce some of the materials from locall resources. There were also a few number of teachers (18.8%) who seek for substitutes for teaching-learning materials from the surrounding to facilitate instruction. Nevertheless, the data in table 10 clearly shows that the highest percentage of teachers (61.3%) of the academic subjects in the three schools depend on their schools for teaching-learning materials rather than creatively and systematically designing alternative ways of acquiring and using them in instruction.

One of the major functions of teaching-learning materials is to create wide opportunities for teachers to use different methods and techniques so that variety of presentation and exposure could be promoted in instruction. Consequently, respondents were asked

to rate (item 9) the methods and techniques they more frequently use in instruction. In this case, three alternatives namely: more frequently, frequently, and less frequently were given a weight of 3,2 and 1 respectively so that averages could be used for analysis. Furthermore, the following criteria of analysis have been established: (a) when the mean score ranges from 0 to 1.5, the rating less frequently was considered. (b) If the mean ranges from 1.6 to 2.5, the option frequently was used and (c) For the mean ranging from 2.6 to 3, the rating more frequently was considered. This is presented in table 11.

Looking at table 11 one discovers that the mean scores of the responses of teachers from the three schools in major part, range from 0 to 1.5. However, the table also shows some exceptions. For example, the mean scores of items 1,2,3, 13 and 14 in Jimma fall between 1.6 and 2.5. The same holds true for items 1,4 and 12 for Bedelle and for items 1,2,3,4,5,12 and 13 for Mettu. This could imply that there was a frequent use of verbalism in the teaching of the academic subjects in the three schools. In fact, a few number of teachers did not respond to some of the items. For instance, 3,10 and 8 teachers from the three schools respectively did not respond to the sub-item 1 (oral questions and answers). These teachers and others who did not respond to the subsequent sub-items, when compared to those who have responded, were very few and therefore, not considered. Rather, the overall mean of the score of the respondents from the three schools could give a general picture regarding the tendency of teachers of the academic subjects to use the 14 itemized methods and techniques.

T A B L E 11

THE METHODS AND TECHNIQUES USED BY TEACHERS IN INSTRUCTION

	METHODS AND TECHNIQUES	Jimma S.S.S (a) 3	(b) 2	(c) 1	N.R	score	$\bar{X}$	Bedelle S.S.S. (a) 3	(b) 2	(c) 1	N.R	Score	$\bar{X}$	Mettu S.S.S. (a) 3	(b) 2	(c) 1	N.R	Score	$\bar{X}$
.	Oral Questions and answere	24	17	2	3	108	2.50	21	7	6	10	83	2.44	25	7	4	8	93	2.58
.	Written questions & answers	20	20	16	0	91	2.21	15	24	3	2	96	1.51	5	26	6	7	73	1.97
.	Class reviews	10	15	13	8	73	1.90	4	12	23	5	59	1.51	7	20	13	4	74	1.85
.	Tryouts and application	2	8	28	8	50	1.30	3	20	15	6	64	1.68	6	10	13	15	51	1.75
.	Written reports	4	5	29	8	51	1.34	2	3	36	3	48	1.17	11	3	27	3	66	1.60
.	Projects and committee work	3	4	30	9	47	1.26	6	8	29	1	63	1.46	0	5	31	8	41	1.13
.	Supplementary reading	7	9	24	6	63	1.57	2	7	31	4	51	1.27	0	12	26	6	50	1.31
.	Field trips	9	3	35	8	41	1.07	0	10	27	7	47	1.27	0	9	33	2	51	1.21
.	Audio-visual aids	0	5	36	5	46	1.12	4	13	22	5	60	1.53	0	8	30	6	46	1.21
0	Reseurce visitors	0	0	38	8	38	1.	5	10	28	1	63	1.46	0	4	37	3	45	1.01
1	Group discussion	5	8	30	3	61	1.41	3	7	26	8	49	1.36	0	18	21	5	57	1.46
2	Outlining	3	9	24	10	51	1.41	2	12	30	0	48	1.09	6	15	17	6	65	1.71
3	Summarizing	11	14	10	11	71	2.02	3	9	31	1	58	1.34	8	11	21	4	67	1.67
4	Problem Selving	13	8	18	17	73	1.87	5	7	20	12	49	1.53	4	9	19	12	49	1.53
						Sum =	21.98					Sum =	20.62					Sum=	21.99
						$\bar{X}$ =	21.98 / 14					$\bar{X}$ =	20.62 / 14					$\bar{X}$ =	21.99 / 14
						$\bar{X}$ =	1.57					$\bar{X}$ =	1.50					$\bar{X}$	1.57

K E Y

(i) a = 3 ⇒ more frequently

(ii) b = 2 ⇒ frequently

(iii) c = 1 ⇒ less frequently

(iv) N.R = no response

(v) score, example;- item No 1 in Jimma

(3x24)+(2x17)+(1x2)

Score = 108

(vi) $\bar{X}$ = mean = $\frac{108}{24+17+2}$

$\frac{108}{43}$ 2.50

(vii) $\bar{X}$= Grand mean = $\frac{21.98}{14}$

$\bar{X}$= 1.57

Hence, as reference to table 11 shows, the grand mean of the scores range between 0 to 1.5. Thus, on the whole, teachers of the academic subjects seem to demonstrate a less frequent use of important methods and techniques that could facilitate curriculum implementation. Nevertheless, there is a need to identify the reason why teachers tended to employ the methods and techniques less frequently. Hence, respondents who indicated their less frequent use of the methods and techniques (table 11 - option c) where asked to show the reasons (item 10) as presented in table 12.

As table 13 presents (grand summary of table 12) teachers of the academic subjects in Jimma, Bedelle, and Mettu seem to less frequently employ varied methods and techniques in instruction due to lack of time and lack of resources (37.8%)and 30.6%). Thus, it appears that the shortage of material resources like additional reference materials, laboratory chemical and supplies, stationery materials and the absence of equipment like projectors and slides (table 8) had become obstacles to teachers of the academic subjects in making their students: (1) prepare and present written reports and review problems through further reading (2) participate in laboratory, demonstrations to make tryouts and applications by using ideas, symbols and formulas they have already been exposed to (3) prepare charts (for exmaple a flow chart showing the life cycle of tape worm in Biology, table chart showing the formation of mountains by means of volcanoes - in geography, and etc.), and (4) had made teachers themselves unable to use different techniques such as audio-visual aids (film shows, slid shows etc.) in instruction.

TABLE 12

REASONS FOR THE LESS FREQUENT USE OF METHODS AND TEACHNIQUES IN INSTRUCTION

Methods and Techniques	Jimma				Bedelle				Mettu			
	(a) Lack of time	(b) Lack of resources	(c) Lack of skill	(d) No response	(a)Lack of time	(b) Lack of resources	(c) Lack of skill	(d)No response	(a) Lack of time	(b) Lack of resources	(c) Lack of skill	(d)No response
1. Oral questions and answers	2	0	0	0	1	0	0	5	0	0	2	2
2. Written " "	2	3	0	11	2	0	0	1	1	3	0	2
3. Class reviews	2	1	2	8	10	11	2	0	4	2	2	5
4. Tryouts and application	7	4	0	17	3	5	7	3	6	1	3	3
5. Written reports	8	5	6	10	17	11	3	5	12	7	5	3
6. Projects and committee work	12	7	5	6	14	10	3	2	12	7	0	12
7. Supplementary reading	5	8	2	9	20	5	4	2	11	5	4	7
8. Field trips	15	16	4	0	9	11	6	1	15	13	2	3
9. Audio-visual aids	12	21	1	2	7	9	5	1	17	5	3	5
10. Resource visitors	17	13	5	3	13	7	6	2	18	14	2	3
11. Group disscussion	10	16	3	1	10	12	3	1	7	6	5	5
12. Outlining	6	8	2	8	9	11	7	3	3	8	4	2
13. Summarizing	3	22	4	1	14	8	6	3	5	7	2	7
14. Problem solving	7	5	4	2	66	4	3	7	7	23	3	7
Total	108	109	38	78	135	104	55	36	118	80	38	66

TABLE 13

GRAND SUMMARY OF TABLE 12.

Reasons	Jimma	Bedelle	Mettu	Total	%
(a) Lack of time	108	135	118	361	37.8
(b) Lack of resources	109	104	80	293	30.6
(c) Lack of skill	38	55	37	122	12.8
(d) No response	78	36	66	180	18.8
Total	325	330	301	956	100

Further, it seems that, as observations have shown, the smallness of the classes and absence of large rooms in the three schools had made teachers unable to employ such methods as group discussions, projects and committee works so that variety could be added to their day today presentations. Still further, it appears that teachers lack of time either due to their preoccupation by administrative activities like maintaining order in the school, categorizing students so that they could be processed by the administratige machinery or to cover the prescribed material for the year had made them unable to employ such methods and techniques as field trips and resource visitors. A few number of respondents (12.8%) indicated that they lack the skill in using the methods and techniques where as 18.8% did not respond to some of the items. These teachers were not considered since they were few in number. Thus, the important thing learned from the data in table 13 is that both lack of time and lack of resources are the major reasons why teachers fail to employ varied methods and techniques in the teaching of the academic subjects.

As a substitute for lack of resources in schools the community in which the school is apart could help as abundant resources for teachers. Professional persons like doctors could make a talk to classes in biology, chemistry, physics,and etc., industrial establishments like factories within a reasonable distance could be visited by students to see at first hand the application of many of the subjects they have studied, professional institutions like colleges could provide help in borrowing materials like

reference books and journals, and can even help to demonstrate the application of school subjects in real life situations like medicine, health and agriculture and governmental establishments like Municipal agencies could help teachers use locall town halls and other centers of government. To benefit more from such community resources teachers are required to involve in the life of the community since such involvement on the onehand helps them to prepare alist of the type, and place where the resources are found and on the other hand help teachers to acquaint themselves with the community for an ease and convinient use of the resources. On account of this, another question was presented to teachers in the three schools (item 11) so that they could indicate whether or not they participate in community activities. Table 14 presents this.

T A B L E 14

TEACHERS INVOLVEMENT IN COMMUNITY ACTIVITIES

Types of Involvement	Jimma	Bedelle	Mettu	Total	%
a) Youth organizations	8	3	5	16	12
b) Women associations	0	0	0	0	0
c) Kebele activities	11	3	5	19	14
d) Teachers associations	14	5	11	30	22
e) Literacy activities	14	4	2	20	15
f) No response	0	29	21	50	37
Total	46	44	44	134	100

According to the data in table 14 the majority of teachers in the three schools show a considerable rate of involvement (63%) in the community. Only 37% of the total respondents do not

participate in the community. It is further observed from the table that the highest rate of community involvement is shown by teachers from Jimma. Such highest rate of participation of teachers in the community of urban areas like Jimma, on the one hand seems to demonstrate the fact that the presence of large number of community organizations in the cities calls for a wide participation by teachers and on the other, indicates the participation of teachers in more than one community activities at a time. The important question to be asked, however, is that "what instructional benefits are accrued to teachers from such community involvement?" Respondents were asked to indicate (item 12) the benefits as shown in table 15.

TABLE 15

INSTRUCTIONAL BENEFITS ARISING FROM TEACHERS' INVOLVEMENT IN COMMUNITY ACTIVITIES

Instructional benefits	Jimma	Bedelle	Mettu	Total	%
a) Using community resources (like human, material and facilities) for instructional purposes	2	3	1	6	5
b) Communicating students problems to parents	12	8	5	25	19
c) Promoting school community relations	9	6	9	24	18
d) Learning administrative skills	13	5	4	22	16
e) No response	10	22	25	57	43
Total	46	44	44	134	100

Table 15 shows that community participation is viewed by teachers, as a whole, either as a means : to communicate students' problems to parents (19%), to promote school - community relations

(18%), or as an opportunity to learn administrative skills (16%). 43% of the respondents did not indicate the benefits as required. Only 5% of the respondents seem to be beneficieries in using community resources to the advantage of instruction. On the other hand, observations have shown that teachers in the three schools have a wide opportunity in using community resources available in their surrounding to facilitate the teaching of the academic subjects. For example, teachers in Jimma could have used: (1) the Jimma Health College to borrow additional reference materials in the sciences, (2) resource people in the college (Doctors, laboratory technicians, etc.) as guest speakers to demonstrate the application of the Natural Science in health and medicine, and even to get manufactured teaching aids like the model of the human body and etc., and (3) the Manucipal halls and the city meusum for film shows and demonstrations respectively. In like manner, Bedelle teachers could have used the Manucipal equipment like projectors, slides and the cinema hall, and the Bedelle Beer Factory which is very close to the school as a learning center for students through observing the machineries, equipment of the electric power system - pulled from a geographically distant place (Gilgel Ghibe) and the raw materials used in the factory to produce Beer. Furthermore, Mettu teachers could have used the Mettu Agricultural Extension Center which is within the immediate vicinity of the school to teach soil types and the corresponding seedlings they grow (geography), the effect of fertilizers in growing the seedlings - which helps to demonstrate the application of chemistry in boosting production, and

resource people in the center as guest speakers during the teaching of geography, biology, and chemistry. Further, the mamucipality of the town, the Sore hydro-electric power station, and the Gumaro tea plantation could have been used for similar instructional purposes mentioned for Jimma and Bedelle. Such an attempt by teachers to seriously identify resources in the surrounding community and using them in instruction at one end helps to vitalize the curriculum and teaching method's, give depth of meaning to instruction, and at the other end promotes the resourcefulness of teachers in providing direct as well as vicarious learning experiences for the learners.

Therefore, unlike the explanations for the opportunities prevailing in the surrounding of the three schools to use community resources, it could be assumed that, though teachers considerably involve in the life of the community (see table 14), teachers either failed to make adequate efforts to use community resources, lack the necessary professional competence (creative identification of community resources that could be used to facilitate instruction), or lack self initiation to exploit the community to the advantage of effective curriculum implementation. Participation in community activities by teachers may even go to the extent of affecting instruction in schools. To assess this state of affaire, teachers were asked to indicate the effects of such participation (item 13) on instruction. This is presented in table 16.

TABLE 16

NEGATIVE EFFECTS ARISING FROM TEACHERS PARTICIPATION IN COMMUNITY ACTIVITIES

Negative effects	Jimma	Bedelle	Mettu	Total	%
a) Taking time, which if otherwise, could be used in planning instruction	2	3	3	8	6
b) Shares teachers time which could be used in assisting students	4	2	3	9	7
c) Results in sudden absentism	0	1	4	5	4
d) All of the above	12	7	5	24	18
e) No response	28	31	29	88	65
Total	46	44	44	134	100

According to the data in table 16, the majority of teachers (65%) did not indicate the negative effects arising from teachers participation in the community. These category of teachers could either be those who do not show any participation in community activities (see table 14) or those teachers who view such a participation only as a via media of promoting school - community relations and learning leadership skills for future self promotion (see table 15). The rest of the respondents (35%) have indicated that teachers participation in the community either takes teachers' time in planning instruction, in assisting students, makes teachers absent from classes or results in all of these. Hence, it could be implied that teachers' time in planning instruction, that is, in selecting and structuring the instrumental contents, in selecting and preparing teaching-learning materials like audio-visual aids, in designing

appropriate activities like group and individual tasks and assignments is wasted by such participations. Furthermore, teachers participation in the community seems to minimize the guidance function of teachers in schools and makes them miss classes, for example, in such cases when the mass organizations call urgent meetings to screen out participants in the national call and in such cases when the teachers themselves serve as guards during nights and thus be absent from their regular duties the following day. Eventually, teachers participation in the community appears to have a considerable effect on instruction which it should not have.

One of the most important professional obligations that teachers should fulfill is provision for concerns of the learners. This, as Johnson, in the description of his model, suggests, marks the quality of teachers performances and, therefore, the effectiveness of instruction. In this connection, teachers in the three schools were asked to indicate the ways they use to provide for individual difference among students (item 14). This is clearly shown in table 17 as follows.

T A B L E 17

WAYS USED BY TEACHERS TO PROVIDE FOR INDIVIDUAL DIFFERENCES

Ways	Jimma	Beddelle	Mettu	Total	%
a) Remedial instruction	4	2	5	11	8
b) Individual consultation	3	3	3	9	7
c) Differntiating tasks	7	7	10	24	18
d) Informal advice and encouragement	28	28	21	75	56
e) No response	6	4	5	15	11
Total	46	44	44	134	100

According to the above table, the majority of teachers in the three schools (56%) seem to use informal ways to provide for individual differences among the learners. In fact, informal advice and encouragement in the form of praise and reward could, to some extent, promote self initiation among students. But, it would be unwise for instructors to consider informal ways as the only approach to provide for concerns of the learners. Thus, there is a need to see differences among students and to diagnose their learning difficulties through individual consulatations differentiating tasks and activities (grouping the learners on the basis of their abilities) and providing remedial treatments so that they (instructors) could make continious follow ups to assist the learners. Only a few number of teachers (8%, 7%, 18%) employ either remedial instruction, individual consultation, or task differentiation respectively. The 11% did not make any response. These teachers could be either some of those who lack time due to their preoccupation by non instructional activities (see table 16) or those who do not bother themselves with the learning difficulties of students. In one way or the other, the data in table 17 clearly indicates that informal approaches are the major ways employed by teachers of the three schools to provide for concerns of the learners. This condition, as any one could imagine, might promote inefficiency of students learning and, therefore, ineffective curriculum implementation by teachers.

3.2. Report, Analysis, and Interpreation of Data Collected Through Observations and Interviews

It is clear that as there are individual differences among students, there are indivudual differences among teachers as well.

For example, some teachers may find it difficult to motivate reluctant learners by using different activities within the classroom, where as other teachers could find many things which they can do within the classroom that will be of some help. Still, other teachers may have respect for the subject they are teaching and for the pupil they are teaching, but may fail to go out of their way to find out more about the learners and to use examples that will be of interest to them. Still further, some teachers may make their subject intrinsically interesting to all the students by trying to add excitement through games (example, contests in answering questions or solving problems), story-telling from the history of their subject, field trips to places where their subject is being applied, and other activities. Hence, this argument seems to endorse the statement that though teachers may be similar in the grade level they teach, in their academic certification, and others, they could differ in what they actually do in the classroom, that is, in their style of lesson presentation (in introducing, in dealing with ideas and concepts of the lesson, in manner of using the chalk board, etc.), in watching the feelings and preferences of the students during instruction, in using varied teaching-learning activities so that students can master what they learn (questions and answers, drills, tryouts, discussions, take home tasks, group or individual projects geared to the application of school learning in real life situations, etc.) and in managing their class properly (watching students learning, promoting order, comfort, cleanliness, etc).

One of the purposes of this study, therefore, was to make at the spot observations of teachers performances in the classroom and interview the concerned individuals so that : (a) the procedures and techniques that teachers employ during instruction could be evaluated, (b) differences between teachers in employing the teaching techniques could be identified to drive some implications (inter and intra grade level), and (c) the overall reaction of the students to the instructional programme of the academic subjects could be identified. Hence, as seen in line with the responsibilities of teachers of the academic subjects in the seminar secondary schools of Illubabor in facilitate instruction, the major factors observed during instruction are presented in tables 18,19, and 20 for analysis together with important issues raised during interviews in the form of a heading and an outline followed by interpretations in relation to literature in the field of curriculum and instruction. Furthermore, the Chi-square analysis and interpretation of the data collected through observation is presented in section 3.2.5.

TABLE 18

STATSTICAL SUMMARY OF CLASSROOM OBSERVATION AT JIMMA S.S.S.

	Teaching techniques	Diploma teachers of Grade 9								Deploma teachers of Grade 10								Degree teachers of Grade 11							
		Amh.	Eng.	Maths	Biolo.	Chem.	Phy.	Hist.	Geog.	Amh.	Eng.	Mathes	Biolo.	Chem.	Phy.	Hist.	Geog.	Amh.	Eng.	Maths. Biolo.	Chem.	Phy.	Hist.	Geog.	
1	Has a plan	1	1	0	1	1	0	1	0	1	0	1	1	1	1	1	1	1	0	1	1	0	1	0	0
2	Provides introduction	0	1	0	1	0	1	0	0	0	1	0	0	0	0	1	1	0	1	1	1	0	0	0	0
3	Outlines main ideas	0	1	1	0	1	1	0	1	0	0	0	0	1	1	1	0	1	0	0	0	1	0	0	1
4	Connects with the presvious	0	0	1	1	1	0	0	1	0	0	1	0	1	0	0	0	0	1	1	1	0	1	1	1
5	Defines main ideas & concepts	0	1	1	0	0	0	1	0	1	0	1	1	1	0	1	1	0	0	0	1	1	1	0	0
6	Gives notes	0	0	0	1	1	0	1	1	0	0	0	0	0	1	1	0	1	1	1	0	1	0	1	1
7	Uses chalk board	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1	0	1	0	1	1	0	1	1	0
8	Gives examples & illustrations	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	1	1	0	0	0
9	Uses appropriate media	1	1	1	1	0	0	0	1	0	1	0	0	1	1	1	1	1	1	0	0	0	1	0	1
10	Asks questions properly	1	1	0	1	1	1	0	1	0	1	0	1	0	1	0	1	1	1	1	1	0	1	1	0
11	Handles responses property	0	0	1	0	1	1	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	1	0
12	Provides feedback	1	1	1	0	0	1	1	1	1	1	0	1	0	0	0	0	1	0	1	1	0	1	0	0
13	Gives practice drills	0	1	0	0	1	1	1	0	1	0	1	0	1	1	1	1	0	0	1	1	1	1	1	0
14	Gives take home tasks	0	1	0	1	0	0	0	1	0	0	1	1	1	0	1	0	0	1	1	1	1	0	0	1
15	Applies proper classroom manage	1	0	0	0	1	0	1	0	0	1	0	0	0	1	0	1	0	1	0	0	1	1	0	0
		7+9+7+8+9+7+7+8								62	5+7+8+7+8+8+8+8							58	7+7+9+11+7+9+6+5						61

Calculation of x^2

$$x^2 = \frac{(O - E)^2}{E}$$

x^2 = Chi - Square

O = Observed value

E = Expected value

C = The number of columnns

R = the number of rows

Df = degree of freedom

= (C-1) (R-1)

= (15-1) (8-1)

= 98

Jimma Diploma; X^2 $= \frac{(1-0.52)^2}{0.52} + \frac{(1-0.52)^2}{0.52} + \frac{((0-0.52)^2}{0.52} - + \ldots + \frac{(1-0.52)^2}{0.52} + \frac{(0-0.52)^2}{0.52}$

Grade 9

Exp = 0.52 $= 0.44 + 0.44 + 0.52 + \ldots + 0.44 + 0.52$

$= (0.44 \times 62) + (0.52 \times 58)$

$= \underline{57.44}$ Calculated Value

Jimma Diploma; X^2 $= \frac{(1-0.58)^2}{0.58} + \frac{((0-0.58)^2}{0.58} + \ldots + \frac{(0-0.58)^2}{0.58} + \frac{(1-0.58)^2}{0.58}$

Grade 10

Exp. = 0.58 $= (0.56 \times 58) + (0.48 \times 62)$

$= \underline{62.24}$ Calculated Value

Jimma Degree; X^2 $= \frac{(1-0.51)^2}{0.51} + \frac{(0-0.51)^2}{0.51} + \ldots + \frac{(0-0.51)^2}{0.51} + \frac{(0-0.51)^2}{0.51}$

Grade 11

Exp. = 0.51 $= (0.47 \times 61) + (-.51 \times 59)$

$= \underline{58.76}$ Calculated Value

TABLE 19

STATISTICAL SUMMARY OF CLASSROOM OBSERVATIONS AT BEDELLE S.S.S.

	Diploma teachers of Grade 9								Diploma teachers of Grade 10								Degree teachers of Grade 11							
	Amh.	Eng.	Maths.	Biolo.	Chem.	Phy.	Hist.	Geog.	Total	Amh.	Eng.	Maths.	Biolo.	Chem.	Phy.	Hist.	Geog.	Total	Amh.	Eng.	Maths.	Biolo.	Chem.	Phy.	Hist.	Geog.	Total
Has a plan	0	1	1	0	1	1	0	1	6	1	0	1	0	1	1	1	1	6	1	1	1	1	0	0	1	0	5
Provides introduction	0	0	0	0	1	0	1	0	2	0	0	1	0	1	0	0	0	2	0	1	0	0	1	1	0	0	3
Outlines main ideas	0	0	1	1	0	1	1	0	4	0	0	1	0	0	0	0	0	1	1	1	0	1	0	0	1	1	5
Connects with the previous	1	1	0	0	1	1	0	0	5	1	1	0	0	0	0	0	1	3	1	0	1	1	0	0	0	0	3
Defines main ideas & concepts	0	1	1	1	1	0	0	1	6	1	0	1	1	1	1	1	1	7	0	0	0	0	1	1	1	0	3
Gives notes	1	1	1	1	0	0	1	1	6	0	1	1	0	0	1	1	0	4	0	1	0	1	0	1	1	1	5
Uses Chalk board	0	1	0	0	1	0	0	0	3	1	1	1	1	1	0	0	0	5	1	0	0	0	1	0	0	0	2
Gives examples & illustrations	0	0	0	1	1	0	1	1	5	1	0	0	1	0	1	1	0	4	0	0	1	0	1	0	0	0	2
Uses appropriate media	0	1	1	1	0	1	1	0	6	0	1	0	0	1	0	1	1	4	1	0	0	1	0	1	1	0	4
Asks questions properly	1	1	0	1	0	0	1	0	5	0	1	1	0	1	1	1	1	6	0	1	1	1	1	1	1	1	7
Handles responses properly	0	0	0	1	1	0	1	0	3	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	1	0	2
Provides feed back	1	1	0	0	1	0	1	0	4	1	1	0	1	0	1	0	1	5	0	1	0	1	0	0	1	0	3
Gives practice drills	1	0	1	1	0	1	1	1	7	0	1	1	0	1	0	1	0	4	1	1	1	1	1	0	0	0	5
Gives home take tasks	1	0	1	1	1	0	1	1	7	1	1	1	0	0	0	0	1	5	1	1	1	0	0	1	1	1	5
Applies proper classroom managt.	0	1	0	0	0	1	0	0	2	1	0	0	1	1	1	0	1	5	1	0	1	1	0	0	0	1	4
	6	9	7	9	9	6	11	7	73	8	8	9	6	8	8	7	8	62	8	8	7	10	6	6	7	5	58

Bedelle Diploma : $X^2 = \frac{(0-0.61)^2}{0.61} + \frac{(1-0.61)^2}{0.61} + \ldots + \frac{(0-0.61)^2}{0.61}$

Grade 9

Exp. =0.61 $= (0.61 \times 47) + (0.25 \times 73)$

$= \underline{46.92}$ Calculated Value

Bedelle Diploma; $X^2 = \frac{(1-0.52)^2}{0.52} + \frac{(0-0.52)^2}{0.52} + \ldots + \frac{(0-0.52)^2}{0.52} + \frac{(1-0.52)^2}{0.52}$

Grade 10

Exp. = 0.52 $= (0.44 \times 62) + (0.52 \times 58)$

$= \underline{57.44}$ Calculated Value

Bedelle Degree: $X^2 = \frac{(1-0.52)^2}{0.52} + \frac{(1-0.52)^2}{0.52} + \ldots + \frac{(0-0.52)^2}{0.52} + \frac{(1-0.52)^2}{0.52}$

Grade 11

Exp. = 0.52 $= (0.52 \times 58) + (0.48 \times 62)$

$= \underline{62.24}$ Calculated Value

TABLE 20

STATISTICAL SUMMARY OF CLASSROOM OBSERVATION OF METTU S.S.S.

Teaching Techniques	Grade 9 (Diplom)								Grade 10 (Diplom)								Grade 11 (Degree)							
	Amh.	Eng.	Maths.	Biolo.	Chem.	Phy.	Hist.	Geog.	Total	Amh.	Eng.	Maths.	Biolo.	Chem.	Phy.	Hist.	Geog.	Total	Amh. Eng.	Maths.	Biolo.	Chem.	Phy.	Hist.	Geog.	Total
Has a plan	1	1	1	1	1	1	0	1	7	1	0	1	0	1	0	1	1	5	1	1	0	1	1	1	0	6
Provides introduction	0	1	1	1	1	0	0	1	5	1	0	1	0	1	0	1	1	5	1	1	0	1	1	1	0	6
Outlines main ideas	0	1	0	0	0	1	0	0	2	1	0	1	0	1	1	1	0	5	0	0	1	0	1	0	1	4
Connects with the previous	1	1	1	1	1	1	1	1	8	0	0	1	1	1	1	0	1	5	1	1	1	1	0	1	1	7
Defines main ideas and concepts	0	1	0	0	1	1	1	0	4	0	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	2
Gives notes	1	1	1	0	1	0	1	0	5	1	0	1	1	1	1	0	0	5	1	0	1	1	1	0	0	5
Uses chalkboard	1	0	0	0	1	1	1	1	5	0	0	0	0	0	0	0	1	1	0	1	0	1	0	1	1	4
Gives examples and illustrations	1	0	0	0	1	1	0	0	3	0	1	0	1	1	1	1	1	6	0	0	1	1	1	0	0	4
Uses appropriate media	0	0	1	1	1	0	1	1	5	1	0	1	1	0	1	1	1	6	1	1	0	1	1	0	1	7
Asks questions properly	0	1	1	1	0	1	1	0	5	1	1	0	1	1	0	1	1	6	1	1	1	1	1	1	0	7
Handles responses properly	0	1	1	0	0	0	1	0	3	0	0	0	0	1	0	1	1	3	0	0	1	1	0	0	1	3
Provides feed back	0	0	1	0	0	1	1	0	3	0	1	0	1	1	0	1	1	5	0	1	1	1	1	0	0	5
Gives practice drills	1	1	1	0	1	1	1	1	7	0	1	1	0	0	0	1	0	4	1	1	1	1	0	1	1	7
Gives take-home tasks	1	0	1	1	1	0	1	0	5	1	0	1	1	1	1	1	1	7	1	1	1	1	0	1	0	6
Applies proper classroom magt.	0	0	1	0	0	0	1	1	3	1	1	0	0	1	1	1	1	6	1	1	1	1	0	0	1	6
	7+	9+	11+	6+	10+	9+	11+	7	70	8+	6+	8+	7+	11+	10			70	10+	10+	10+	13+	9+	7+	11+	8	78

Mettu Diploma: $X^2 = \frac{(1-0.58)^2}{0.58} + \frac{(1-0.58)^2}{0.58} + \ldots + \frac{(1-0.58)^2}{0.58}$

Grade 9

Exp. = 0.58 = (0.30 x 70) + (0.58 x 50)

= 50 Calculated Value

Mettu Diploma: $X^2 = \frac{(1-0.58)^2}{0.58} + \frac{(0-0.58)^2}{0.58} + \ldots + \frac{(1-0.58)^2}{0.58}$

Grade 10

Exp. = 0.58 = (0.30 x 70) + (0.58 x 50)

= 21 + 29

= 50 Calculated Value

Mettu Degree: $X^2 \quad \frac{(1-0.65)^2}{0.65} + \frac{(1-0.65)^2}{0.65} + \frac{(0-0.65)^2}{0.65} + \ldots + \frac{(1-0.65)^2}{0.65}$

Grade 11

Exp. = 0.65 = (0.19 x 78) + (0.65 x 42)

= 42.12 Calculated Value

3.2.1. Students Entering Characteristics

(a) Teacher's observations and comments

(i) The majority of students have less interest in learning the academic subjects due to lack of command of the medium of instruction (English) and lack of pre-requisite knowledge in the previous grades.

(ii) Teachers insist that large classes and teaching loads have prevented them from helping the learners in the instruction of the academic subjects.

(b) Students attitudes and feelings

(i) Students lack motivation in learning the academic subjects. For example, they dislike to attend physics, mathematics, chemistry, and English classes because these subjects are hard and not clear to them.

The entering characteristics (behaviour) refers to the kind of things (attitudes, feelings, aptitudes, maturity level, etc.) that the students bring with them to the instructional situation. As explicitly put by Shulman (1970) "the kind of entering characteristics of the learners greatly determines students learning of a subject matter, the amount and type of instruction and the nature of the instructional sequence" (pp.62-63). This is to mean that among other things, the learners level of physical and psychological maturity and their knowledge of the area in which instruction must proceed are key factors in determining the learners motivational patterns in the instructional process. In this connection, an interview made with some of the teachers in Jimma,

Bedelle,and Mettu indicates that the majority of students, though physically matured (above 16 to 17 years of age in most cases) seem to have less interest in learning the academic subjects. In this regard, some students were also asked to indicate their attitude towards the academic subjects. For example, a 17 years old grade 9 student from Bedelle, and 3 grade 9 grade 10, and grade 11 students from Mettu have unanimously indicated that they dislike to attend physics, mathematics, chemistry and English classes, because these subjects are difficult and not clear to them. At this point, it seems important to note that no subject is inherently difficult to be understood by the learners. If this is so then, where does the problem lie? On account of this, a discussion made with teachers of the aformentioned subjects indicates that students consistently show poor performances in the above subjects possibly due to lack of good command of the medium of instruction (English) and due to lack of the necessary intellectual background needed for these subjects in the previous grades. From these discussions with teachers and students it could be implied that students lack adequate prerequiste knowledge (concepts, basic ideas, and principles underlying each academic subject) for their present learning. The pedagogical implication of this, as any one may agree, would be the need for adequate effort and guidance by teachers to establish those conceptual foundations necessary to understand the academic subjects. Once these initial underpinings have been established, most subsequent instructions can proceed both more effectively and more efficiently. However, as the discussions made with some of the teachers in the

three schools indicate such and effort and guidance by teachers seem to be absent in the schools due to lack of time - the largness of the number of students and maximum teaching loads.

According to a document from the Ministry of Education (1982), each and every teacher in schools is required to bear a load of 30 periods per week and those having less number of periods (less than 30) are obliged to participate in other activities, whether administrative or instructional to fulfill their duties. Though the document of the MOE shows the maximum load to be bore by every teacher in this country, research in the field shows that minimum load for teachers is significant in enhancing the teaching and learning of any subject. As convincingly explained by Douglas (1940) the quality of teaching service and the effectiveness of pupil teacher relationships are determined not only by competence and deligence of teachers themselves, but also very largely by the weight of teaching assignments (pp.217-218). Further, the weight of teaching assignments may be determined by working conditions which govern them (the ratio of students to teachers-the number of students per-class). The largeness of students in a class, infact, hamper the teacher from reaching every student for assistance. However, Azeb (1989) has convincingly presented the importanceof ability grouping and re-grouping to diagnose the learning difficulties of students so that the learners could be assisted according to their needs (pp.88-113). This seems, therefore, to be an alternative teaching strategy that the teacher can use to provide the necessary help and assistance to students even when there are large number of students in the class.

In spite of the above assertions, at the spot observations in the three senior secondary schools have shown that the number of students in each class at all levels is not more than 40 and the maximum teaching assignment of teachers in each of the three schools was not more than 25. Therefore, it appears that, according to the standards set for loads by the MOE, the question of maximum teaching assignments may not justify what the teachers have insisted to be the partial cause for their inability to provide the necessary assistance for the learners. In addition, the number of students in each class of the three schools, when compared to those of other regions (for example, 80 students per class in Yekatit 12 Senior Secondary School on the average in Addis Ababa) seems to be manageable. Furthermore, teachers of the academic subjects seem to have the necessary training and teaching skills (see table 2 - qualification). Therefore, teachers in Jimma, Bedelle, and Mettu seem to be unable to provide for concerns of the learners not due to lack of time but due to other reasons which could possibly be either lack of interest and self initiation, lack of concern, lack of adequate followups, or due to improper selection and recruitment.

3.2.2. Lesson Presentation

(a) Teacher's observations and comments

(i) Almost all the teachers observed in the three schools consistently failed to employ the lesson presentation techniques as required (see tables 18, 19, and 20 throughout).

(ii) Oral presnetation (lecture) was the predominant teaching procedure employed by the teachers.

(iii) Though the directors greatly expect teachers to provide lecture notes for students in the subjects they taught, teachers, in their turn fix this expectation on students even when there are no enough copies of text books.

(b) Students feelings and attitudes

(i) The learners, in almost all the lesson observed, were passive.

(ii) The students were not attentive and not fully engaged in the instructional programme.

(iii) In almost all the classes observed, the learners were not responsive to the teacher's questions and demands because they were not clear to them.

(iv) Students were observed squacking desks and tables during the lessons to share copies of textbooks among their peers.

The heart of the instructional function of the teacher in teaching any subject is a well articulated presentation of a lesson. Systematic presentation, first and for most, begins with good introduction. For example, in information lessons; either questioning, visual aids, or demonstration could be used to stimulate interest (marshall facts from previous knowledge), to focus attention, and to give a clear idea of what is wanted respectively. It is in this part of presentation that the teacher also makes the objectives of the lesson clear for students. As Taba has stated, clear understanding of objectives of the lesson helps students to organize their own efforts and activities for the accomplishment of the important instructional intent (pp.197-198). Further,

introduction also helps to relate the main ideas to be learned with the previous material and as Goodlad has stressed" "the teacher must see to it that what the student seeks to know builds readily on what he already knows" (p.190). Moreover, what is being learned must be adapted to what has been learned. In like manner, that which has been learned in the past must be related to what is being learned in the present. It is with this understanding that Adams (1958) writes by saying ". . . what is learned has new meaning here and now, and furnishes a foundation for future learning (p.107).

An important principle of learning is to go from the known to the unknown. This means that the teacher introduces the lesson by connecting it with what he knows and with what the students already know that has to do with the new lesson. In this regard, only a limited number of teachers observed in the three schools were found providing introduction, that is, some providing oral questions which could brush the memory of students (see table 18 - grade 10 English, History,and Geography teachers of Jimma, table 19 - grade 11 English, Chemistry,and Physics teachers of Bedelle, table 20 - grade 9 English, Mathematics, Biology,and Chemistry teachers of Mettu), and others revising the main points from the previous lessons and then connecting them with the new lesson. For example, grade 11 mathematics instructor from Jimma (see table 18) before presenting "the division of polynomial functions as a new lesson, first explained the division of rational functions, linear equations, and quadratic equations, and then proceeded to the division of polynomial functions. Such a systematic approach

to introduction seems to have a dual purpose. In the first place, it helps the learners to recall the previous knowledge, and secondly it reminds them of that the new lesson is based on what the learners have already covered. This is the same as saying that systematic introduction maintains the sequence and integration of a subject and therefore keeps its internal logic. Nevertheless, observations have shown that except few, teachers' efforts were minimum in this regard.

A host of other activities that characterize lesson presentation are outlining and explaining important ideas and concepts, using variety of examples and illustrations, providing comprehensive and clear notes for students. In particular, when a new lesson is presented the provision of handouts and or lecture notes for students is very important. To this end Davis (1981) notes that note taking and class handouts play a great deal in facilitating students learning. This is because that notes and handouts contain selective points and concepts collected, other than textbooks, from various sources to be refered and mastered by students even when they are out of school. Corrolary to classroom explanations and note taking, the use of relevant audio-visual aids, demonstrations, verbal and appropriate gestural experessions, and movements from one corner to the other to intentionally focus the attention of the learners to the materials being present are earnestely needed to give life to the lesson and save the learners from boredom. Azeb (pp.68-69), Wallin(pp.420-421) Perrot (pp.28-29), and a host of other educators have underlined the

importance of these teaching techniques. However, observations in the three senior secondary schools have shown quite a different picture.

In almost all cases, teachers observed have been using lectures in presenting their lessons. For example, a grade 11 physics instructor from Mettu was observed using lecture when presenting a new lesson on the movement of sound waves. He neither outlined basic concepts related to the lesson (wave, trough, crest) on the chalk board nor explained them by demonstrating concrete instructional aids (see table 20). The result was that students were passive (did not respond to the teachers questions), not fully engaged in the instructional programme (some whispering and others doing their mathematics assignment) and, therefore, were not attentive.

A short discussion made with the instructor after the end of the period indicates that students were expected to prepare their own lecture notes from text books and there were no relevant teaching aids for the lesson. However, observations have shown that there were no sufficient copies of student texts since students were seen sharing one book for five and in some cases for more. Reporting on this matter, the director of the school has noted that absence of enough copies of textbooks in subjects like physics and history and shortage of other instructional aids are crucial problems in all schools, and because of this, teachers are urged to provide lecture notes for students and use materials available in the surrounding. This statement by the director seems to conform with the data presented on table 8. Nevertheless,

the teacher ought to have given clear lecture notes for the students, demonstrated the movement of wave motions using a rope, and should have either taken a few minutes to go around the class once quickly or made appropriate eye contacts with students to assess whether or not they were fully engaged in the lesson.

Another grade 11 instructor from Jimma was observed presenting a lesson on the "Creation of the book" (student text, pp.188-189). The students were busy in reading orally the passage one by one. However, the instructor neither used the chalk board nor explained important ideas in the passage (see table 18). The result was that students were not able to construct sentences using the words "brittle, aspirations, pith, clumsy, and scribes", since they have not clearly understood them. Thus, the teacher, after having made the students read the passage, should have explained key concepts and words in the passage, and then asked students to construct sentences using their own words. If others wise, the students may not develop their comprehension capacity and vocabulary capability, but remain in the vicious circle as regards their competence in the English language.

3.2.3. Teaching-Learning Activities

(a) Teahcer's observations and comments

As at the spot observations have shown

(i) teachers' classroom oral explanations and oral questions and answers were the major teaching-learning activities during the instruction of the academic subjects.

(ii) a few number of teachers were seen giving classroom drills and take home tasks.

(iii) teachers insisted that they failed to engage their students in activities like classroom discussions, written questions and answers, class reviews and reports, tryouts and etc. due to (1) lack of time to cover the syllabus (2) the largeness of the number of students and (3) due to the shift system.

(b) Students feelings and attitudes

(i) Students have indicated that only a few mathematics and language instructors give short assignments and class room exercises.

(ii) in almost all the classes observed, students were not motivated to respond to the teachers questions and demands.

It is generally stressed that students learn most readily through their own activities and not only through teachers' activities. This means that there is a need for teachers to engage their students in a wide range of activities. This marks the quality of the performance of good teachers. Ayres (1986) writes that "good teachers find ways to activite students, for they know that learning requires adtive engagement between the subject and object matter"(p.50). Amiden (1976) is reported to have indicated that classrooms in which there is a large percentage of question asking, students responding and teachers reinforcing have significantly greater achievements than classrooms in which these conditions are present to a lesser extent (Ademe et. al. 1989, p.83). It means, therefore, that efficient learning depends on well chosen and

well managed activities. A good teacher will always use activity as a means to an end and select with care the activities he uses so that they serve best the process of learning.

Thus, activities like informal class discussions, written questions and answers, and oral questions and answers, class reviews and others help in clarifying concepts and ideas; specific assignments, tryouts, written reports, projects and committee work have a great role in helping students apply the concepts learned. Application of what has been learned helps students to realize the importance of school learning in real life situations. For example, as put by Pollak (1970), application of mathematical concepts and principles serve three relatively distinct ends;" they illuminate situations in every day life, they may help in the development of other disciplines and they may be of value in some other branch of matheamtics (p.311). In connection with Pollak's view of mathematical applications, it may be possible to demonstrate how mathematics can be applied in everyday life - which is the first and most obvious kind of application. It is important to realize that not only arithmetic, but, also algebra, geometry, and infact most of elementary and secondary mathematics are likely to be involved. It is also interesting that such everyday applications my be exact or approximate, as in the case for example, when we say "did he raise or lower the price of tobacoes?" Thus, when we check the computation of sales tax, try to figure out how much paint it will take for the living room, buy a shirt of the right size or plant a certain number of tomatoes, we are using mathematics in everyday life. Problems of this kind might naturally appear in the textbook. The curx of the matter is whether or not teachers

help students to apply them at least in the school or in the surrounding.

When seen in relation to the notion of activities and the particular importance they have in relating classroom instruction with real life situations, the case with the three senior secondary schools seems to be different. Observations have shown that the dominating teaching-learning activities are teachers classroom oral explanations and oral questions and answers. Only a few mathematics instructors (grade 10, and grade 11 instructors from Jimma, Bedelle and Mettu respectively) were observed giving classroom exercises and take home tasks (see tale 18,19,and 20). An interview made with some of the teachers shows that the senior secondary shool programme is very tight and there is no time to engage students in projects and other activities. The largness of the number of students and the shift system were other reasons menationed by the teachers as the partial causes for restricting teaching-learning activities to oral encounters only.

In fact, large classes could prevent adequate interest in and help for the individual pupil, hinder the cordial pupil-teacher relationships which are essential for effective guidance, and add the number of jobs to be done during instruction and especially to the amount of energy and nervous tension required in teaching. However it seems that the shift system could be used as an alternative mechanism to help students and carry out a wide range of teaching-learning activities like short trips, subject matter clubs, projects like measuring distance, measuring the area of

the school compound, collecting specimens,and original objects and the like-since both teachers and students will be free during either the first or the second half of the day. Observations have shown that teachers efforts were minimum in this regard.

Such activities as classroom drills and tests may help in achieving lesson objectives, the ability to compute numbers and figures, construct a sentence or define a word at the end of a given lesson. But, their value in enhancing retention and the attainment of the programme objectives in the long range would be questionable, For example, one of the objectives of the mathematics programme states that the student would be able to apply knowledge of mathematics in his every day problems" (Curriculum Department, 1984, p.195). The attainment of such an objective needs more activities than mere classroom drills. Together with class activities and rills, problems taken out of real life geared to the application of what has been learned are needed if the aim is to promote the transfer of training.

3.2.4. Classroom Setting and Classroom Discipline

(a) Observations and comments

Though the three senior secondary schools are located in good setting (suburb areas) and free from environmental disturbances, the classroom setting of the three schools were not conducive since:

(i) the windows of the classrooms in major part were broken.

(ii) almost all the walls of the classrooms were free from displays of wall-charts, good pictures, and specimens to create a deep impression in the learners.

(iii) The classrooms were dirty and lack obvious necessities like a waste paper basket or places to put dusters.

(iv) Some of the teachers observed were using inappropriate techniques of classroom management.

(b) Students feelings and attitudes

(i) In most of the classes observed students were inattentive and restless due to distrubances and noises coming to the classrooms through the broken windows and were seen changing their seats to avoid the resulting discomforts.

(ii) Students seemed to be frustrated since some teachers tended to make them take up an uncomfortable position for a period of time during instruction for every bit of classroom disorders.

Among other things, the classrooms and their surroundings, the walls of the classroom, the compound, the streets,and the shops of town that the school buildings stand next to are important factors influencing instruction. Davis has put that ease and convinience of location, size and shape of the rooms, climate, illumination and audio-visual aids, seating and viewing patterns and flexibility of arrangement,(p.108)are important aspects of classroom setting which add to the proper structure of good learning environment. If the structure of the room is ugly, sensitive minds would be inhibited and distracted. The result could be ineffective learning but serious classroom misbehaviours. In this connection, the three senior secondary schools are located in the suburb areas and thus, in major part, seem to be free from

distructive sounds and noises created by things like the city (town) traffic complications. However, the classroom environments of the three schools were found to be not conducive. Almost all the windows (made up of glass) of the classrooms in the three schools were broken. The classrooms were dirty (full of dust and scrap papers). The walls of the classrooms were free from displayed aids which could help students learn unconsciously. The result is that noises and spurious sounds and light could easily come to the classroom through the broken windows. Noting the negative effects of such classroom environments Herman (1968) states that "just as poorly written books or an improperly working pen can retard the process of education, a drafty, leaky,and noisy classroom imped that educational process" (p.380). In support of Hermans view, Ronald states that "spurueus sounds or noises can mask desirable sounds and prevent or reduce their perception"(1971, p.406). On account of this, students were not attentive but were observed changing their seats by squeaking desks to avoid the light and distrubances coming to the class through the windows.

Furthermore, in rare cases can one find maps, diagrams, charts and the like hanged or fixed on the walls to add to the acoustic environment of the classroom. On the other hand, in the compound of the three schools one finds colourfull slogans and pictures of socialist patriots (Marx and others) which make one feel surrounded by Zebras. A disscussion made with the directors, deputy directors, and unit leaders of the three senior secondary schools indicates that there is an acute shortage of fund for school maintenance, to hear clearners, and to make available the

necessary materials for the production and utilization of instructional aids. In fact, shortage of material and financial resources are the major problems of education in this country. However, if there is a will and concern for the problem, teachers and administrators in the school could creatively tackle the problem in such cases as, for example, collecting specimens and orginal objects which could help as instructional aids, mobilizing students to produce models from mud and from paper machies, to clearn their classrooms and the like. The school administration could establish student service centers like tea rooms to generate fund, rather than letting students go out from the school compound to drink tea and coffee during break times (Bedelle senior secondary school deserves a typical example in this regard) - a fact which could worsen classroom disciplines like late coming, missing the after break classes,and etc.

As has been mentioned earlier, students lack of attention and interest in the academic subjects due partly to poor competence in the English language and lack of adequate teaching-learning activities added to the conditions of classroom setting, classroom misbehaviours were observed in the majority of the classes observed. Normally, when a concept, idea, or procedures of doing assignments are not clear for students, the learners may not feel comfortable, may be frustrated and may misbehave. This could encourage classroom misbehaviours further. Thus, it is better to remedy the cause first. To this end, Martha (1977) has stressed that "respect for students, consistency and faireness,

keeping diginity and self discipline" (p.23) by the teacher could facilitate good classroom disciplines. Thus, good discipline in a classroom is a joint strategy of both the teacher and the students. Students could also distrub when they are not busy or when the teacher does not keep an eye on the pérforamance of each pupil (like the history instructors of Bedelle and Jimma who were very busy in giving notes for students on the chalk board but were not paying any attention to what the students were doing) (see table 18 and 19). This happens when students are idle. As reported by Biddlle and Dunkin (1974) "the teacher should make students busy and actively engaged in intellectually relevant activities" (p.35). Thus activities like additional exercises for the fast learners or challenging questions could make students busy and, therefore, promote discipline in the classroom.

Eventually, some of the teachers observed were seen using poor teachinques of classroom management. For example, a grade 9 Biology teacher from Mettu was abusing the students by saying "stupids, keep quiet!" where as grade 11 Chemistry teacher from Bedelle made a student kneel down informt of the class (see table 19 and 20). The teacher has reported that this is the usual way of managing students and unless they are physically punished students in this school are untolerable. It seems important to note that physical punishments and handling classroom misbehaviours in an improper manner have become the culture of the schools. Therefore, Sarasen (1985) is not wrong when he says "if we want to change the schools, we have to change their culture, not just the individuals, the programes, or the external policies." (P.342)

3.2.5. The X^2 Distribution of the Data Obtained by Observations

It has already been indicated in the preceding section of this study that one of the primary purposes of at the spot classroom observations was to find out whether or not there is a significant difference between teachers of the academic subjects in employing appropriate teaching techniques during instruction. As table 2(qualification) indicated, almost all the teachers of the academic subjects in the three schools possessed satisfactory academic certifications (Degree and Diploma) and were assigned to teach in the various grade levels on the basis of their qualification. Though teachers might be similar in (1) their qualification, (2) in the grade level they teach, and (3) in the subject they deal with, they may or may not be similar in demonstraing appropriate instructional techniques in teaching due to either self initation and concern for effective curriculum implementation or failure to effectivelly apply the pedagogical skills and techniques acquired during their training. Hence, there is a need to statistically identify whether or not teachers in the three schools differ in employing appropriate teaching techniques during instruction, and it was because of this that the study made this as one of its tasks.

In this section of the study, the data collected through observations was analyzed using the X^2 test since "the data were expressed as frequency counts rather than as measurements" (Paul, 1980, p.204) and since the data were recorded observations of subject behaviours, in this case, the teaching techniques of teachers of the academic subjects in Jimma, Bedelle, and Mettu.

A total of 24 classroom observations (incorporating diploma teachers of grades 9 and 10 and degree teachers of grade 11) were made in each of the three senior secondary schools. Data were collected by dicotomizing the teaching techniques demonstrated by teachers of the academic subjects during instruction (a deight of "1" for the yes and a weight of "0" for the no was given). Tables 18,19, and 20 present the data collected through observations. Furtheremore, the overall summary of the calculated values of X^2 are presented in table 21 as follows.

T A B L E 21

SUMMARY OF THE CALCULATED VALUE OF X^2 of TABLES 18,19, AND 20

	Diploma		Degree
Schools	Grade 9	Grade 10	Grade 11
Jimma	57.44	62.24	58.76
Bedelle	46.92	57.44	62.24
Mettu	50	50	42.12

The X^2 distribution of the data collected through classroom obse#vations indicated the following results. The observed values (calculated values) of X^2 for all grade 9 teachers in the three schools (Jimma, Bedelle,and Mettu) were 57.44, 46.92 and 50 respectively, where as those of the grade 10 were 62.24, 57.44 and 50 respectively. In addition, the observed values of X^2 for grade 11 teachers in the three schools were 58.76, 62.24, and 42.12 respectively. On the other hand, the tabled value of X^2 at 98 degree of freedom with 0.05 confidence level ($\alpha = 0.05$) is 124.34 for all the three schools. By definition, when the calculated

values of X^2 are less than the tabulated value, there is no significant difference among the characteristics of the subjects in concern. Hence, in this case, as table 21 indicates, almost all the calculated values of X^2 between the grade levels and between the school levels, in major part, were less than half of 124.34. This means that there is no significant difference between the teaching techniques of (i) teachers of the same grade level on the one hand and (ii) teacher of the different grade levels in the three schools on the other. Therefore, it appears that, even though teachers of the academic subjects possess different certification standards and, on these basis, assigned to teach in the different grade levels, the quality of their performances as regards the employment of appropriate instructional techniques seems to be similar. On the other hand, the discussions made under section 3.2 of this study have established that, except some, most of the teachers of the academic subjects in the three schools were observed employing ineffective instructional techniques during the lessons of the academic subjects. It could be implied, therefore, that though teachers of the academic subjects possessed satisfactory certifications to teach in the senior secondary schools, it seems that most of them failed to apply what they were trained in and, thus, there still remains for them to do what they were taught to do through professional education courses.

IV. SUMMARY, CONCLUSION, AND RECOMMENDATION

In this section of the study, the major findings of the discussions made under part three and summarized. Under the conclusion part the basic questions raised in part one of the study would be answered. Finally, suggested solutions are given under the recommendation section.

4.1. Summary

The major findings derived from the analysis of data under part three of the study are presented as follows.

1. The majority of teachers of the academic subjects use instructional planning to facilitate curriculum implementation (84%).
2. The correspondence of the curricular objectives with the other components is found to be moderate (the $\bar{X}$ and $\bar{X}$ of the responses consistently fall within the rangel.5 to 2.4) and teachers of the academic subjects seem to maintain this moderate condition through further reading and by consulting the curriculum authorities.
3. The contents of the academic subjects were, in major part, organized vertically (40%) and to some extent both vertically and horizontally (29%).
4. Teachers maintain the vertical and horizontal organi$_z$ation of the contents of the subjects they teach by enriching the contents through further reading (43%) and by using resource people as required (24%).
5. Other than textbooks and references, teaching-learning materials were found to be consistently low in the three schools ($\bar{X}$ scores were 0.43, 0.32, and 0.45 for all the three schools respectively).
6. The majority of teachers depend on their respective schools (61.3%) for all the necessary teaching learning materials. Only a few number of them produce them (12%) and or seek for a substitute from the surrounding (18.8%).

7. When seen as a whole, teachers of the academic subjects tend to demonstrate a less frequent use of important methods and techniques that could facilitate curriculum implementation ($\bar{X}$ scores range from 0 to 1.5).

8. It seems that teachers failed to employ various methods and techniques in instruction due to lack of time (37.8%) and lack of resources (30.6%).

9. Though a considerable number of teachers participate in the life of the community (63%) only a limited number of them (5%) were found to be beneficiaries in using community resources to the advantage of instruction.

10. A considerable number of teachers indicated that the participation of teachers in the community could negatively affect instruction in schools (35%).

11. Teachers provide for students conditions and problems using informal ways (56%).

12. As at the spot observations and discussions with teachers, students and directors have shown

    (i) students have less interest in learning the academic subjects due to lack of (a) command of the English language, (b) minimal prerequisite knowledge from the previous grades and (c) adequate assistance by teachers.

    (ii) almost all the teachers depend on oral presentations (lecture) rather than employing varied teaching procedures and techniques.

    (iii) though the school directors expect teachers to provide lecture notes for students, teachers failed to fulfill this expectation.

    (iv) the classrooms of the academic subjects lack a considerable number of question asking, students' responding and teachers reinforcing.

(v) though the three schools were located in convinient areas of the towns, the setting of the classrooms were not conducive since (a) there was no maintenance for the broken windows and doors, (b) the walls of the classrooms were devoid of display materials which could add to the acquistic environment of the class, and (c) the majority of teachers were using inappropriate techniques of classroom management and as a result of this students were not at ease but restless and frustrated during the teaching and learning of the academic subjects in the [illegible]

(vi) eventhough teachers of the academic subjects in the three schools possessed different certifications (Degree and Diploma) and on these basis assigned to teach in the various grade levels, their performances regarding the employment of appropriate instructional techniques and procedures were not significantly different (the observed values of X^2 for all the three schools at 98 Df. with (α=0.05 were<124.34).

4.2. Conclusion

On the basis of the major findings derived from the report, analysis, and interpretation of the data collected through questionaire observations and interviews, the following conclusions were made.

1. The result of the present study indicated that the highest percentage of teachers of the academic subjects in Illubabor senior secondary schools use instructional planning to facilitate curriculum implementation (84%) and promote the correspondence of the curricular objectives with other components ($\bar{X}$ scores range from 1.5 to 2.4) through further reading and by communicating with the curriculum authorities as required. Therefore, it appears that, in line with Johnson's model, teachers of the academic subjects in the senior secondary schools of Illubabor seem to do a good job in planning their day to day instructional

work and in selecting, structuring, and organizing the curricular contents of the subjects they teach so that instruction could be facilitated.

2. The study further evidenced that in cases where the contents of academic subjects show improper organization (40% vetical and 29% both vertical and horizontal) teachers of the academic subjects in Illubabor senior secondary schools make a remarkable effort to fit the curriculum of the subjects they teach to their pupils by enriching the contents through further reading (43%) and by using resource people in their vicinity (24%). This, as Johnson's model suggests, this implies that teachers of the academic subjects in Illubabor senior secondary schools are flexible in dealing with the curriculum of the subjects they teach, that is, to some extent use their creativity and individual styles to decide what they teach and how to order what they teach.

3. In spite of the meagre nature of teaching-learning materials in Illubabor senior secondary schools ($\bar{X}$ scores$\angle$0.5) only a limited number of teachers of the academic subjects in the region endeavoured to acquire the necessary materials in their own (30%). The implication of this, therefore, is that too many teachers of the academic subjects in the region seem to be unconcerned about the shortage of these important means of instruction in their respective subjects, and thus, failed to make the little effort they could to promote the acquisition of these materials to facilitate curriculum implementation.

4. The result of the study indicated that the highest percentage of teachers of the academic subjects in Illubabor tended to demonstrate a less frequent use of important methods and techniques of instruction in the subjects they teach ($\bar{X}$ scores range between "0" and "1.5"). This condition, as any one could imagine, shows that teachers of the academic subjects in Illubabor senior secondary schools failed to effectively apply the professional knowledge and teaching skills they had acquired during their training and thus, depend upon verbal presentations as the predominant teaching procedures rather than using them as departure points for effective instruction.

5. The highest percentage of teachers of the academic subjects in Illubabor senior secondary schools show participation in the life of the community (63%) but only few teachers (5%) seem to be beneficiaries in using community resources to the advantage of instruction. It goes without saying, therefore, that teachers of the academic subjects in the region do not use their surrounding environment for much of their teaching. Furthermore, a considerable number of teachers failed to carefully identify and catalogue those resources and facilities available in the community and which have relevance to the teaching and learning of the academic subjects in the senior secondary schools.

6. The study lent support to the statement that the provisions made for concerns of the learners by teachers of the academic subjects in Illubabor senior secondary schools were minimum (only informal advice and encouragement (56%). Hence, it appears that teachers of the academic subjects in Illubabor senior secondary schools seem not to do whatever they can to overcome the deep social and emotional problems that underlie the learning difficulties of the students and which, in every case, make success impossible.

7. The result of the study further indicated that teachers of the academic subjects in Illubabor senior secondary schools adhered to strict verbal encounters during instruction rather than providing many opportunities for sensory experience right in the classroom and also seem to fail in making their students learn from real-life experiences.

8. Senior secondary school students of Illubabor seem to have less interest in learning the academic subjects since (a) they lack good command of the medium of instruction (English), (b) most of the teachers of the academic subjects used to employ sarcasm in dealing with problem students and (c) teachers seem to make no provision for the entering characteristics of the learners. Therefore, unlike what Johnson notes in his model, adequate diagnostic activities to clearly identify the learners' emotional conditions, their intellectual maturity, and students' knowledge of the area in

which instruction must proceed seem to be underscored by teachers of the academic subjects in Illubabor senior secondary schools in the course of instruction.

9. No significant difference was observed in the teaching techniques employed by teachers of the academic subjects in Illubabor senior secondary schools (observed value of X^2 at 98 Df. with α=0.05 $\leq$ 124.34 for all teachers in all grade levels). It seems evident, therefore, that differences in the certification standards of teachers of the academic subjects in Illubabor senior secondary schools has not indicated the presence of a significant discrepancy between Degree and Diplom teachers of the academic subjects in the region in employing relevant instructional techniques in teaching. In other words, as the preceding conclusions could indicate, all teachers of the academic subjects in Illubabor senior secondary schools seem to be ineffective in carefully applying what they were trained in, that is, they failed to employ the arts, that is, the methods and techniques underlying their subjects of speciality during teaching due to the absence of self initiation and or lack of adequate follow ups. Hence, the teaching and learning of the academic subjects in Illubabor senior secondary schools seems to make survival a more urgent concern than scholarship.

4.3. Recommendation

On the basis of the preceding conclusions, the following recommendations are made with the view to improve the teaching and learning of the academic subjects in the senior secondary schools of Illubabor.

1. In a poor country like ours sophisticated teaching and learning materials like electrically operating teaching aids may not be adequately available in schools. Those which are

available in little amounts may not even be enough for all schools. In such a case, an alternative strategy is to use basic resources - the production of which entails a greater proportion of local materials. Such resources like models and wall charts could be prepared from locally available materials like paper-mache, local materials of woody or fiberous nature, light cloth, heavy cloth and the like. Therefore, teachers of the academic subjects in Illubabor could be advised to recognize, with increasing force, the educational value as well as the economic wisdom of creating their own teaching aids from these materials. Further, teachers and administrators could moblize talented students from evey class so that these students could produce charts, models, collect specimens, and original objects from their surrounding to creat display materials in their schools. In doing this, students on the one hand learn with enthusiasm, since in most cases, more learning is derived from doing, and on the other had, benefit their school in producing instructional aids from local resources. If this is done, teachers can have more opportunities to vary their approaches in the teaching of the academic subjects.

2. In the absence of adequat teaching and learning materials and facilities in schools the surrounding community could be utilized by teachers. For example, audio-visual materials like projectors and slides could be borrowed from Government and manucipal estalishments. Students could use professional institutions like the Jimma Health College to borrow reference materials such as books and journals. Industrial establishments like Bedelle Beer Factory and state farms like Gumaro Tea Plantation could be visited by students to experience the application of the subjects they learn in schools in real-life situations. These would be possible only if teachers themselves are aware of their community to be helped by its abundant educative resources. Thus it would be useful if teachers of the academic subjects in Illubabor senior secondary schools are advised to identify and use community resources in their teaching to the advantage of effective curriculum implementation.

3. In view of the variety of teachings to be carried on and of the situations and resources appropriate for their pursuit, it becomes clear that the variety of teaching tasks desired for effective curriculum implementation may not be found in one person. Thus, there is a need for school directors and their deputies of the senior secondary schools of Illubabor to devote increased time and energy in helping teachers locate and make effective use of appropriate instructional aids and supplementary materials. Furthermore, it seems necessary for them to learn enough about the contents, methods and techniques underlying the teaching of the academic subjects so that they could (a) make periodical followups to test the implementation of the curriculum plan in their schools and also to make (without hesitation) significant referents to the limitations of teachers and (b) encourage both teachers and students for cooperative intellectual work.

4. It is obvious that problems in education are social problems, and teachers alone can not solve social problems. Thus, the society in general and the communities in which the schools exist in particular are accountable too. Hence, when there is a need to provide maintenance services in schools, buy the necessary educational materials, equipment, and facilities and supplies the ways and means to create sources of fund can be designed by the community in collaboration with teachers and administraters. Thus, parents could occassionally be asked to raise fund or could co-operate with school personnel in establishing student services like lounges and welfare programmes for students who come from rural areas. The school community can be served from such programmes and in a way could raise adequate fund for instructional purposes in the long range. Further, students, particularly the girls could be mobilized by means of home economics and handcraft teachers to produce salable goods to generate fund for the school. Thus, the directors and their deputies in Illubabor senior secondary schools could implement these strategies in their schools, rather than re-itterating by saying, as the directors and their deputies have indicated, "we have no money to round

off the cornners, tear out the walls, or introduce one way glass windows."

5. It is generally claimed that a teacher in the entire sequence of instruction, that is, a teacher who does not know the subject matter, or who is unsympathetic and who offends the students and hurts their self respect can seriously damage, or permanently destroy, a student's love for that particular subject. Once a student dislikes the subject, he may not care to regard it in a rational manner. On the other hand, a teacher who has learned that he must get acquintance with each students individual capabilities and allows each student to retain some self-respect, that is, he will not wound the pride of his students two deeply as he is led into exploring his own capabilities and limitations. Further, carefully trained teachers in the principles and techniques of modern teaching would act as artists because their teaching act would produce students' and teachers 'behaviours' which are truely acdeptable. Such teachers demonstrate an artistic blend of skillful technique and a discerning sense about the uniquiness of their students. This type of teachers are also cognitive artists and, therefore help their students grapple with important ideas and not with the trivial facts and information. Teachers of this sort have clearly grasped the critical difference between knowledge and intellectual skills which make knowledge useful. This means that such teachers build upon memory and stress the higher mental functions so well described in educational literatures. The classrooms of this sort of teachers are not characterized by sporadic assignments, or occasional assignments only but by various daily activities, classroom discussions, group and individual works, projects, oral and written reports, and others. On account of these assertions it is here recommended that the Ministry of Education, in collaboration with the Department of Curriculum and Instruction of the Addis Ababa University, could organize workshops and occasional programmes for teachers of the academic subjects so that they

could be equipped with the principles and techniques of modern teaching. Further, there seems to exist a need to give g#eater emphasis on the techniques and procedures of teaching the individual academic subjects in the training programmes given to the would be teacher students. If other wise, teachers will frequently adher to their orthodox approaches and will not very often use conventional procedures in teaching.

6. It is generally accepted that no two students are exactly alike. In schools, therefore, one finds students of different emotional and social problems and prospects. For example, a student may extremely be shy and may not want to expose himself in the class or develop friendship with his school mates. Another student may be starved of affection at home and consider himself as unwanted and, thus, develop worrying symptomes of maladjustment such as aggression or withdrawal. Some students may even develop maldjusted behaviours in schools when the lesson does not appeal to them in such cases when they lack pre-requisite knowledge for their present learning, when they are unable to understand what is taught or when the teacher's approaches do not conform with the learning speeds of students. These factors (social and emotional) can have a damaging effect on the progress of the learners. In the absence of a specialist help, teachers are required to take prompt and appropriate action for remedial measures - remedial instruction, group or individual consultation, differentiating tasks and activities and what have you. To do this teachers themselves need to have minimal skills in guidance and counseling. Therefore, in senior secondary schools like those of Illubabor trained personnel in guidance and counselling are meagre as compared to the growing number of student population every year in all schools in this country. An alternative strategy could be to provide subject teachers with some knowledge of guidance and counselling by means of workshops and seminars to that they could help students with learning problems in their schools.

7. In the final analysis, the selection and recruitment of future student teachers must capitalize on interest in the profession and mastery of teaching skills by means of micro teaching programmes during actual training.

Eventually it seems worthy to note that education is a co-operative enterprise and a joint venture between teachers, parents, administraters, government organizations and the concerned educational agencies, and the students themselves. Thus, in no way can one escape from accountability when the programme of schooling becomes ineffective and loose. Therefore, the concerned authorities and individuals in Illubabor need to find ways to provide assistance to classroom teachers. They need to accept fully and whole heartedly that education is a shared responsibility among all whether policy makers or executers, teachers or administrators and intellectuals or the lay citizens. Hence, they need to provide the necessary assistance and concern for the quality of schooling in general and of implementing the curriculum of the academic subjects in particular. If otherwise, they would be headed towards increased confrontation.

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Definition of Terms and Symbols

The following terms are used in this thesis project as they are defined below.

Assessment : The process by which as many data as possible are gatherd and used to evaluate a person (s) more accurately (Good, 1973,p.43).

Audio-visual : A generic term refering to experiences, equipment, and materials used for communication in instruction. Implies techniques based upon practices utillised in education and training (Brown,et.al 1964,p.365).

Audio materials: Instructional materials that use listening as the primary process of communication. In this category are phonograph records, recorded tapes, sound tracks from motion pictures, sound from television, and other reproduced sounds (Ibid).

Community Resources:

Any materials, agencies, activities or persons in a community that may be utillized by a school program to provide learning experionces (Ibid).

Discipline: An organized body of knowledge about aunique domaine of things and events (the facts, data, observations, sensations, pereceptions and sensibilities) that constitute the basic elements of knowledge or from which knowledge is derived (saylor, et. al, 1966:p.164)

Hidden Curriculum: The croweds, the praise, and the power that combine to give a distnictive flavour to classroom life cellectively (Jackson, 1968: P. 33).

Instruction : Is the implementation of the curriculum plan (Sayler, et. al, 1981: P. 357).

Instructional objectives: Are descriptions of a performance you want learners to be able to exhibit before you consider them competent (Mager, 1984: P.5).

Learning: Is the process by which an individual investes cultural content with meaning, there by becoming capable of acting differently toward that item, or another item of cultural content (Johnson, M. 1981).
Is a personal activity which each student must carry on for himself (Ebel, 1972).

Learning Experience: refers to the interaction between the learner and the external conditions in the environment to which he can react (Taylor, 1949: P. 63).

Media :- Are any means by which messages may be carried between human beings (Farrant, 1981 P. 291)

Methods of teaching:- Are the different approaches the teacher uses and patterns of acts that serve to attaine certain outcomes and guard againist certain others and tactics used by the teacher to control instructioal setting (physical and social) and to present the learning task, induoe-trial responses, correction of trial responses and evaluation of the outcomes of instruction (Azeb, 1984, pp.19-20)

Model ;- A pattern of something to be made or reproduced,. representation of an object, principle or idea (Good, P. 370).

Performance : Actual accomplishement as compared to potential ability. (Ibid. P 414)

Principles of Teaching :- comprise a complete systematic theory of an educativd process under the stimulation and control of the teacher (Monroe, 1968: P. 533)

Resources: Is an organized plan of suggestions centered around some problem, with objectives, planning, learning experience, evaluation, activities, and materials to assist the teacher in planning teaching (Anderson, 1956: P. 362).

Teaching : Is the systematic promotion of learning by what ever means (stenbouse, 1983: P. 24)
It is the process by which one persen interacts with another with the intension of influencing his learning (Johnson, Ibide).

Teaching : Techniques : (1) Specific ways of presenting instructional material or conducting instructional activities (2) The teacher's manner and method of teaching (Good, P. 590)

Symbols

CDRI : Curriculum Development and Research Institute.

EMPDA : Educational Materials Production and Distribution agency.

MOE : Minstry of Education

N.R : No Responce

PMAC : Provisional Military Administrative Council

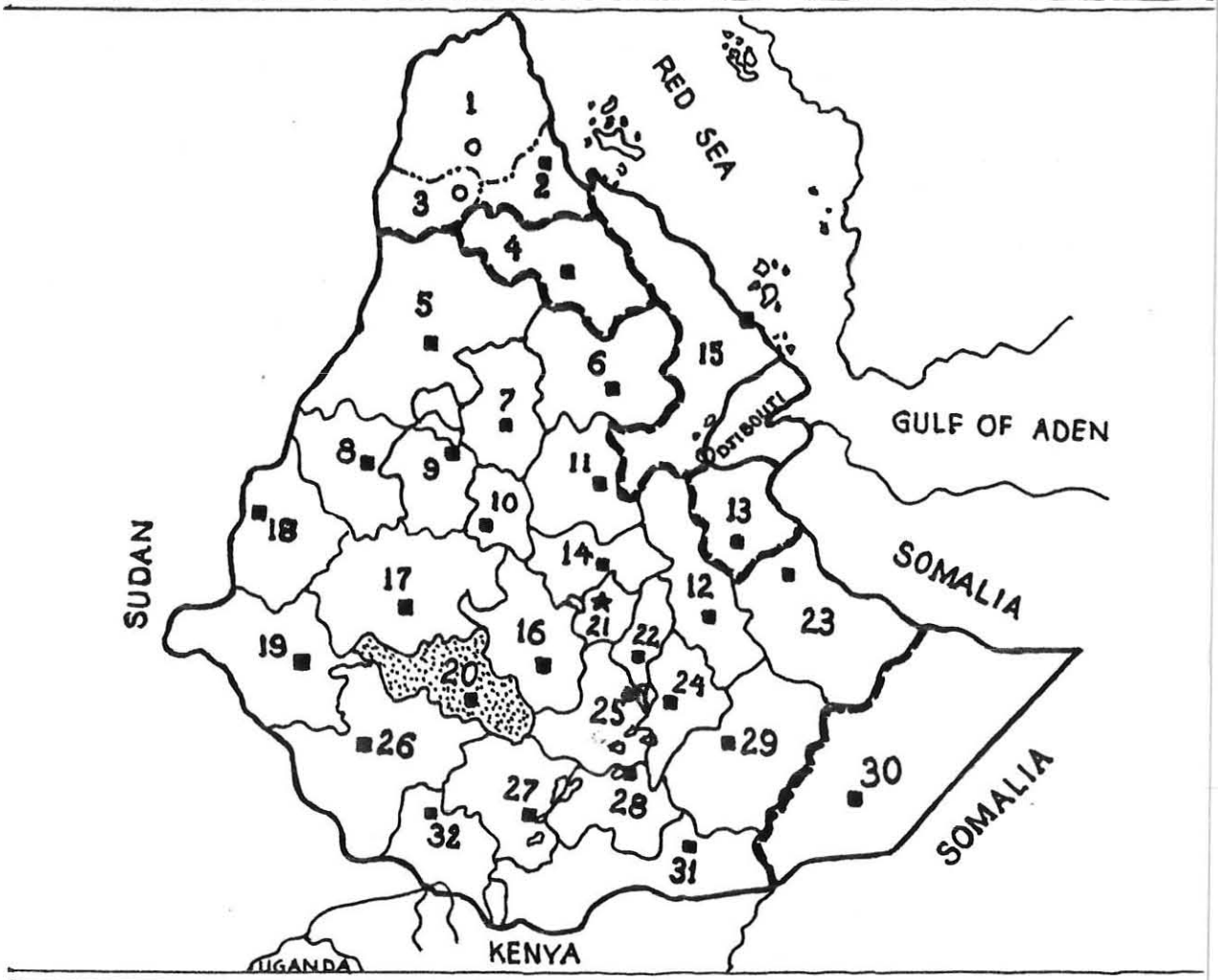
S.S.S : Senior Secondary School

A P P E N D I C E S

A

PDRE AUTONOMOUS AND ADMINSTRATIV REGIONS

— INTERNATIONAL BORDER
— BORDER OF ADMINSTRATIV REGIONS
▬ BORDER OF AUTONOMOUS REGIONS
---- BORDER OF SPECIAL ADMINSTRATIV REGIONS
■ CENTER OF ADM. AND AUTO. REGIONS
○ CENTER OF SPECIAL ADMINSTRATIV REGIONS
★ CAPITAL CITY
LAKE

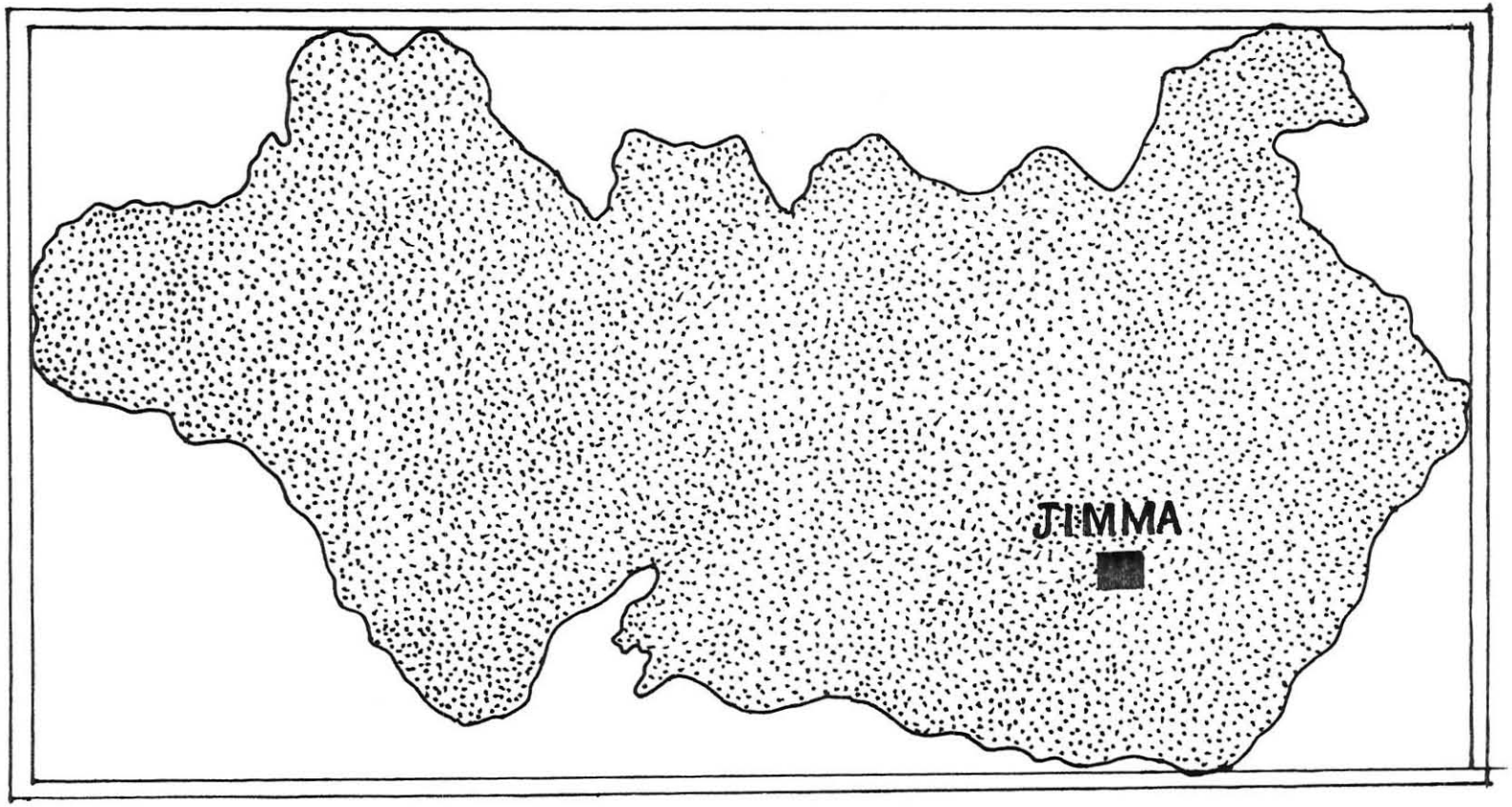


1. NORTHERN ERITRIA	12. WESTERN HARARGHE	23. EASTERN HARARGHE
2. SOUTHERN ERITRIA	13. DERE DAWA	24. ARSI
3. WESTERN ERITRIA	14. NORTHERN SHOA	25. SOUTHERN SHOA
4. TEGRAI	15. ASEB	26. KEFFA
5. NORTHERN GONDAR	16. WESTERN SHOA	27. NORTHERN OMO
6. NORTHERN WELLO	17. WELLEGA	28. SIDAMO
7. SOUTHERN GONDAR	18. ASSOSSA	29. BALE
8. METEKEL	19. GAMBELLA	30. OGADEN
9. WESTERN GOJJAM	20. ILLUBABOR	31. BORENA
10. EASTERN GOJJAM	21. ADDIS ABABA	32. SOUTHERN OMO
11. SOUTHERN WELLO	22. EASTERN SHOA	

SOURCE: Institute Of Ethiopian Nationality Studie
Addis Ababa June 1988 (Unpaged)

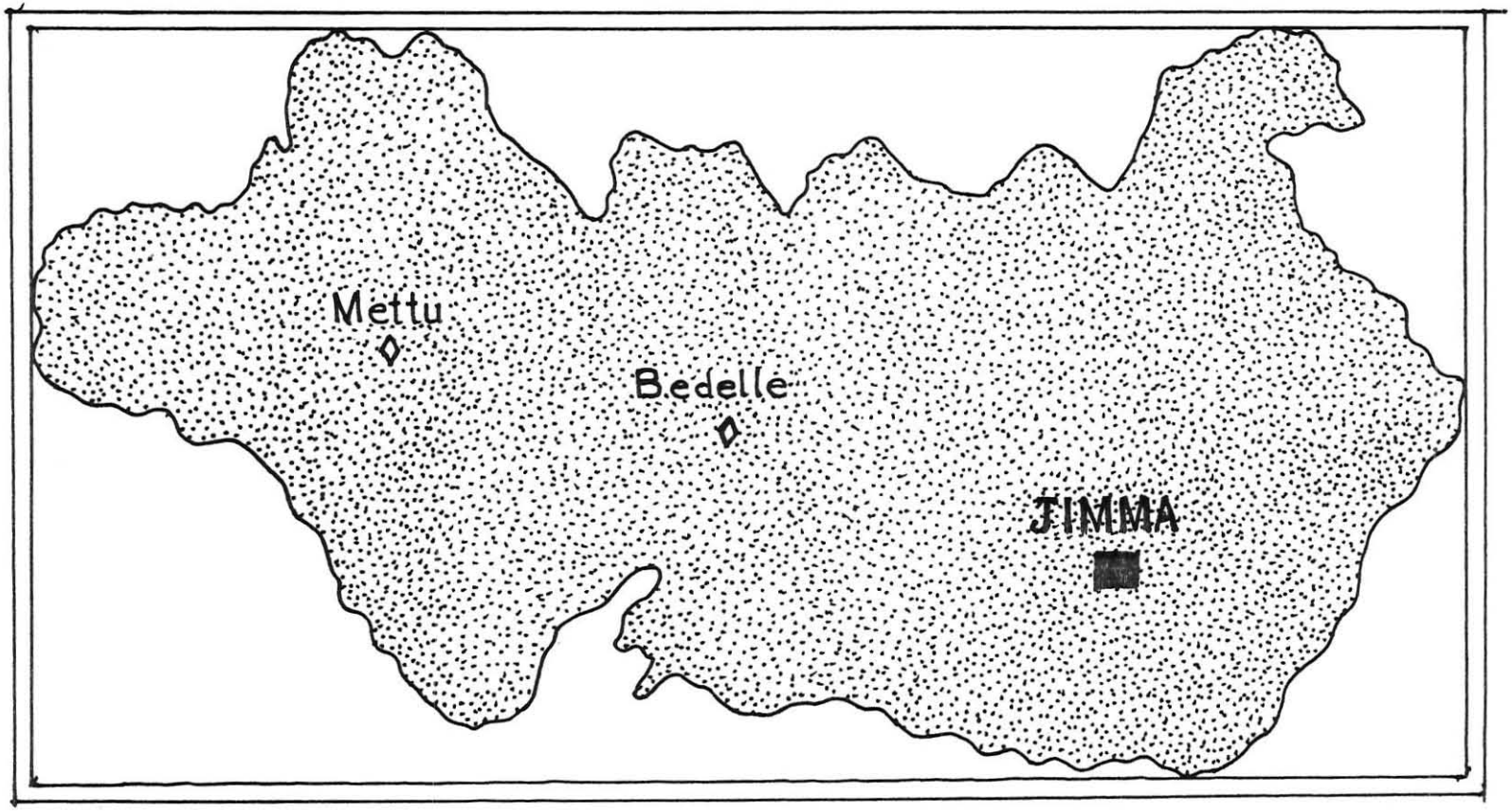
B

ILLUBABOR ADMINSTRATIV REGION



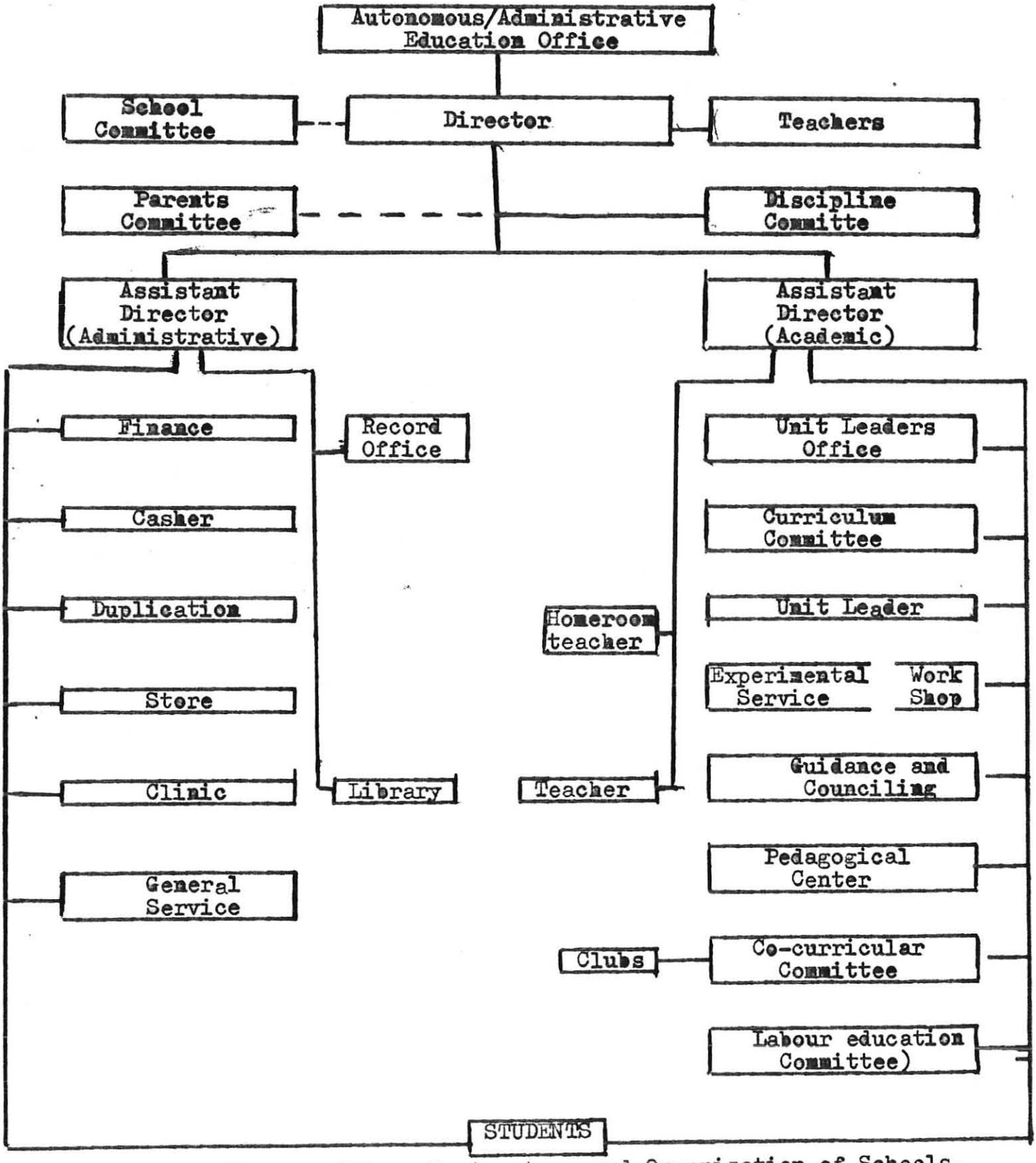
C

GEOGRAPHICAL LOCATION OF JIMMA , BEDELLE , AND METTU



D

ORGANIZATIONAL STRUCTURE OF
SENIOR SECONDARY SCHOOLS



Source: Internal structure and Organization of Schools, Part One. MOE, EMPDA, 1989, p.94.

E

ADDIS ABABA UNIVERSITY
DEPARTMENT OF CURRICULUM AND INSTRUCTION
SCHOOL OF GRADUATE STUDIES
EDUCATIONAL QUESTIONAIRE

DATE _____

To be filled only by Governmental Senior Secondary Schools of Illubabor

Purpose of the Questionaire: The primary purpose of this questionaire is to assess the performances of governmental senior secondary school teachers of Illubabor as they pertain to curriculum implementation (instruction) and come up with suggestive ideas which could help as a springboard to overcome problems persisting during curriculum implementation (instruction). Hence, your honest response is earnestly needed and your cooperation is greatly appreciated. There is no need to write your name.

Part One - Preliminary Information

I. Direction:- For the following questions indicate your response by making a "✓" in the boxes which correspond to them. For those having no alternative responses, you are requested to give a short and precise response on the space provided.

1. Name of the School _____
2. Sex Male ☐ Female ☐
3. Age 20 - 30 years ☐ 30 - 40 years ☐
4. Qualification _____
5. Year of service in the profession _____
6. Year of service in the present school _____
7. The subject(s) you are teaching _____
8. Grade level(s) taught at present _____

Part Two

Direction:- The directions given for part one equally apply for part two.

1. Do you use planning to facilitate classroom instruction?

   Yes ____ No____

2. To which of the following instructional plans do you give emphasis in the subject you are teaching?

   a yearly plan ____ daily lesson plan ____
   a semester plan T___ to all of the above ____

3. In the subject you are teaching, the correspondence between the curricular objectives and the contents is

   high (3) ____ moderate (2) ____ low (1) ____

4. In the subject you are teaching, in cases when the correspondence between the curricular objectives and contents are low, indicate the mechanisms you use to combat the problem. _____
   _____.

5. In the subject you are teaching, if the contents are organized, they are:

   ____ vertically organized (show consistency from one grade level to the other).
   ____ horizontally organized (show relationship with other subjects).
   ____ organized both vertically and horizontally.

6. If the contents are not properly organized, provision is made for students unity of thinking when planning instruction by

   ____ enriching the contents through further reading.
   ____ consulting resource people and teachers in other subjects.
   ____ Jumping those contents which show poor organization.

7. In the subject you are teaching, indicate the conditions of the following teaching learning materials (instructional aids) by making a "✓" in the space provided.

Teaching-Learning Materials	(a)=(2) Adequately Available	(b)=(1) Moderately Available	(c)=(0) Not Available
Students' texts			
Teachers guide			
Books			
Journals			
Pamebtets			
Menographs			
Charts			
Graphs			
Maps			
Models			
Cartoons			
Real objects			
Lab.equipments			
Lab. chemicals and supplies			
Projectors			
Films			
Slide			
Records			

8. In question "7" if your response is (c)(not available). indicate the mechanisms by which you facilitate the acquisition of materials, at least partially by making a " " in the space provided.

Teaching Materials	(a) Produce Oneself	(b) Insist the School Purchase	(c) Seek for a Substitute from the surrounding
Student texts			
Teachers guide			
Books			
Journals			
Pamphlets			
Monographs			
Charts			
Graphs			
Maps			
Models			
Cartoons			
Real Objects			
Lab. equipments			
Projectors			
Films			
Slids			
Recorders			

9. In the subject you are teaching, indicate the methods and techniques you use in the instructional process by using a " " .

Methods and Techniques	(a) More frequently (3)	(b) Frequently (2)	(c) Less Frequently (1)
1. Oral questions			
2. Written questions and answers			
3. Class reviews			
4. tryouts and application			
5. Written reports			
6. Projects and Committee Work			
7. Supplementary Reading			
8. Field trips			
9. Audio-visual aid			
10. Resource visitors			
11. Group discussion			
12. Outlining			
13. Summarizing			
14. Problem solving			

10. In question "9" for the items you have responded by saying "less frequently" indicate the reason by using a " ".

Methods and Techniques	(a)lack of time	(b)lack of Resoruc.	(c)Lack of skill
1. Oral questions & answers			
2. Written questions & answers			
3. Class reviews			
4. Try out and application			
5. Written reports			
6. Projects & committee work			
7. Supplementary reading			
8. Field trips			
9. AudioOvisual aids			
10. Resource visitors			
11. Group discussion			
12. Outlining			
13. Summarizing			
14. Problem solving			
15. Producing models of charts			

11. In which of the following community activities do you show participation?

(a) in youth organizations ☐
(b) in women associations ☐
(c) in Kebele activities ☐
(d) in teachers association ☐
(e) in literacy activites ☐
(f) _____ ☐
(g) _____ ☐

12. In which of the following areas has such community involvement benefited you?
(a) in using community resources and materials for instructional purposes. ☐
(b) in communicating students problems and prospects to parents. ☐
(c) in promoting school community relations ☐
(d) in learning administrative skills ☐

13. Which of the following negative effects arise from involvement in community activities?
(a) taking your time in planning instruction.
(b) shares the time which could, if other wise, be used in assisting students.
(c) it results in sudden absentism.
(d) all of the above.

14. In the subject you are teaching, which of the following ways do you use to provide for individual differences among students?
(a) providing remedial instruction.
(b) individual consultation.
(c) differentiating tasks and activities.
(D) informal adivce and encouragement.

F

OBSERVATION CHECK LIST

Name of the School _____

Teacher's Qualifidation _____

Year of Experience _____

Class Observed _____

Subject Observed _____

Number of Students in class _____

ENTRY

1. Teacher's Behaviour	Yes(1)	No(0)
(i) Has a plan	____	____
(ii) Provides introduction	____	____
(iii) Outlines main ideas	____	____
(Iv) Connects with the previous	____	____
(v) Defines main ideas and concepts	____	____
(vi) Gives notes	____	____
(vii) Uses chalk board	____	____
(viii) Gives exmaples and illustrations	____	____
(ix) Uses appropriate media	____	____
(x) Asks questions properly	____	____
(xi) Handles responses properly	____	____
(xii) Provides feed back	____	____
(xiii) Gives take home tasks	____	____
(xiv) Applies proper classroom management	____	____
2. Student's Behaviour		
(i) Are attentive	____	____
(ii) Show motivation to learn	____	____
(iii) Ask and answer questions	____	____
(iv) Are cooperative	____	____
(v) Are disciplined	____	____

INTERVIEW GUIDE (FOR TEACHERS)

Name of the School _____
Qualification of the teacher _____
Classes in which the teacher teaches _____
Year of experience in the school _____
Total year of experience in the profession _____
Grade(s) taught _____
Subject(s) taught _____

1. How do you rate the interest of the students in the subject you are teaching?
2. If the interest of students is low, what possible reasons and causes can you suggest?
3. Do all students attend your subject always?
4. Have you ever been exposed to a course, a seminar or a workshop to acquaint yourself (other than the methods of teaching) with the techniques of teaching the subject?
5. Do you make contacts with the director and or the administrator to deal with issues relating to the improvement of the instructional programme?
6. How do you find the syllabuses, the teachers guides and students texts in relation to the actual realities?
7. Do you participate in co-curricular activities?
8. How do you see the status and role of co-curricular activities in your school in improving the instructional programme?

G

INTERVIEW GUIDE (FOR DIRECTORS)

Name of the School _____

Qualification of the director _____

Year of experience in the profession _____

Year of experience in the school _____

1. Are there adequate instructional facilities and materials (textbooks, teaching aids, laboratory equipments, etc.) in the teaching and learning of academic subjects?
2. Where the facilities and materials are inadequate, what mechanisms do you use to facilitate the instructional programme?
3. Do you make contacts with the community outside the school to the interest of the instructional programme?
4. How do you rate the performances of teachers of the academic subjects in your school?
5. Other than the workshops and seminars given at national level do you make intra-staff contacts and meetings in facilitate the implementation of the curriculum and what achievements have been made so far?
6. What particular concerns do you make for the learners so that they could carefully respond to the instructional programme?
7. How do you participate teachers and students in co-curricular activities, i.e. do you randomly assign them or provide for individual preferances?

C

INTERVIEW GUIDE (FOR STUDENTS)

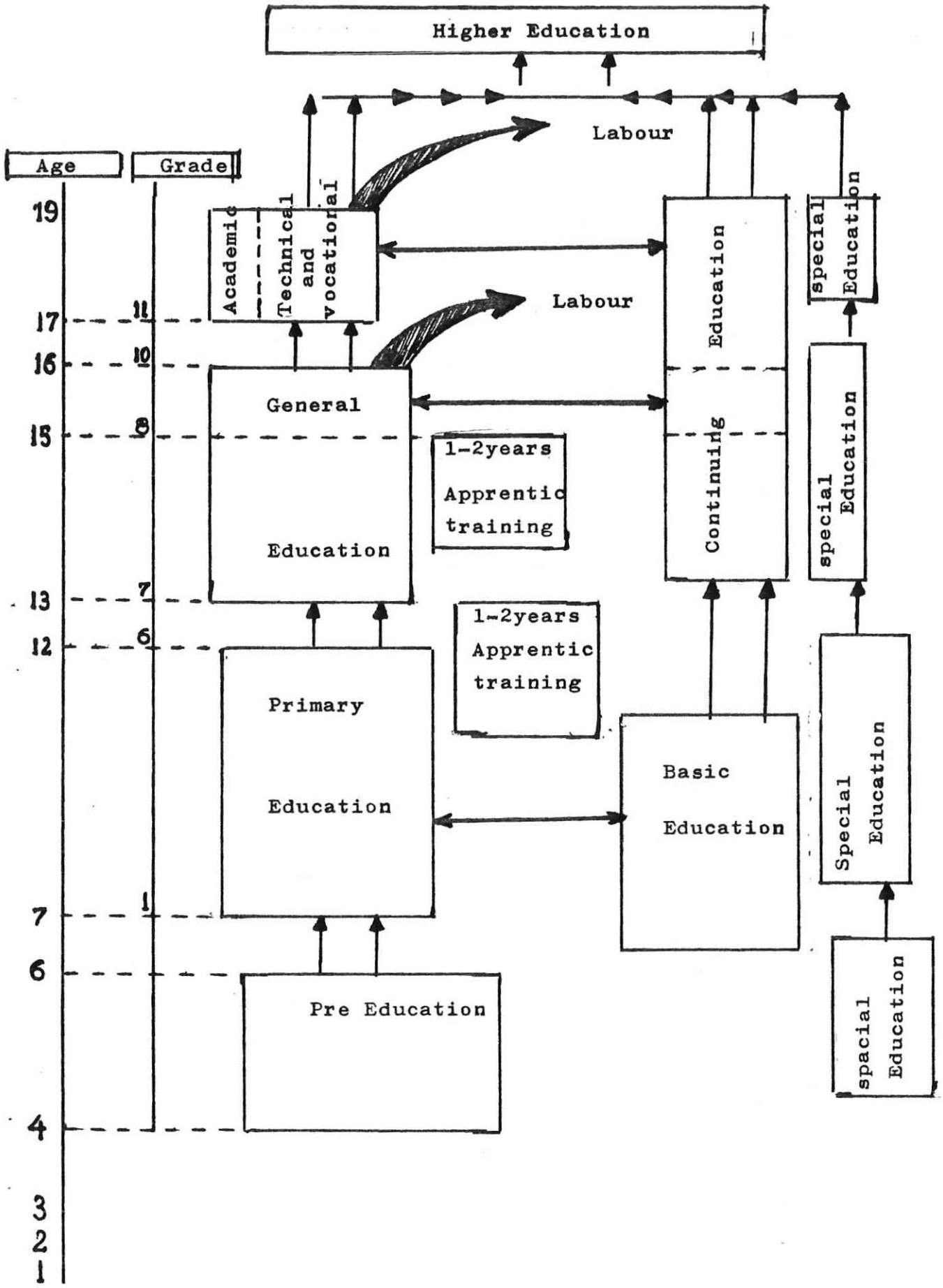
Name of the school _____

Present Grade level of the student _____

Total year of stay in the school as a student _____

1. How do you see the textbooks of the academic subjects?
2. Which of the academic subjects do not appeal to your interest, and what do you think is the reason?
3. Are teachers of the academic subjects in your school competent enough in teaching their respective subjects? That is, do their methods, techniques and procedures of teaching attract and motivate you?
4. Are teachers of the academic subjects sympathetic with you, in time of your problems, whether instructional or none inside or outside the class to assist you in overcoming your difficulties?
5. Do your teachers use instructional aids other than the textbooks?
6. Are you always encouraged to make drills and exercises by your teachers?
7. Do you get additional reference materials in your schools or from the surrounding?
8. What major instructional problems do you think exist in your school?

The New Structure of Ethiopian Education After 1974.



Source: Educational policy Guidelines and Directives. Addis Ababa: MoE, 1971 E.C. (Unpublished, Translated from Amharic) P. 15

DECLARATION

I, the undersigned, declare that this thesis is my original work, has not been presented for a degree in any other university and that all sources of material used for the thesis have been duly acknowledged.

Name : Hailu Dinka

Signature _____

Place: Department of Curriculum and Instruction,

Addis Ababa University.

Date of Submission June 19, 1991