

FACTORS AFFECTING THE INTERNAL
EFFICIENCY OF RURAL PRIMARY SCHOOLS IN
TIGRAY

BY:
LISANU ASHEBIR



A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES
OF ADDIS ABABA UNIVERSITY IN PARTIAL FULFILLMENT OF THE
REQUIREMENT FOR THE DEGREE OF MASTER OF ART IN
EDUCATIONAL PLANNING AND MANAGEMENT.

ADDIS ABABA

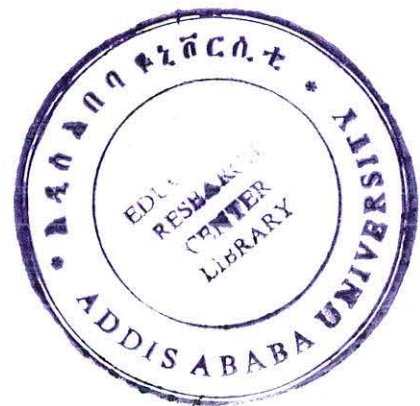
MAY 31, 2004

ADDIS ABABA UNIVERSITY

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APPROVAL OF BOARD OF EXAMINERS

Girma Abebe Girma A

Chairperson, Department Graduate committee

MELAKI YIMAM Melaku S.
Advisor

M.T. BASTIAN MjBastian
Examiner

Ash M. Y. M.
Examiner

Acknowledgement

I would like to express my heart-felt gratitude to my advisor Ato Melaku Yimam for his valuable help, comments and suggestions he gave me in the preparation of this thesis.

My special thanks also goes to SOS Children's Villages Ethiopia, for providing me the opportunity of furthering my academic qualifications. I would also like to express my deepest appreciation and thanks to my friend Ato Atakilti G.yohannes, who provided me with all the assistance I need during all the time I had been following my studies.

Last but not least, I would like to thank all the participants/ subjects of the study, the students, teachers and principals of the sample schools for devoting their precious time in responding to my questionnaire.

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ABSTRACT

The purpose of this study was to determine the factors that affect the internal efficiency of rural primary schools in Tigray region. Attempts were made whether in – school and out of school factors have an effect on the level of the internal efficiency of the schools.

In an effort to identify the effect of these factors on the rate of dropout and repetition, data were gathered from eight sample schools that were selected randomly and documents from the Ministry of education and Tigray Region Educational Bureau. The study included 394 students, 112 teachers and 8 school principals. Questionnaires were the instruments of data collection. The data gathered from documents and through questionnaires were analyzed using frequencies, percentages and other statistical tools such as spearman rank order correlation and mean scores.

The findings have indicated that out of school factors like distance between home and school, students' health problems and problems that were caused by drought were important factors that significantly affected the rate of repetition and dropout of school. In - school factors like large class size, teachers' expectation of their students, preschool education and the absence of necessary school facilities were also found to have an impact on the rate of dropout and repetition of students. The out of school factors were found to be the major ones that have a strong effect on the rate of repetition and dropout as compared to the in-school factors.

Based on these findings and conclusions drawn, it was recommended that measures regarding the provision of supplementary food supply to students, especially to those at lower grades, the construction of new schools in resettlement areas, provision of preschool education be considered to minimize the prevailing situation of repetition and dropout.

CHAPTER ONE

1. The Problem and its Approach

1.1. Background of the Problem

Education is one of the important sectors that require huge investment. It is assumed that the education sector deserves such an investment because it is a key contributor to the economic development of countries by providing a human capital that brings about skills and increases productive capacity. According to Easterline (in Psacharopoulos and Woodhall, 1985:21), the contribution of education is emphasized as follows:

The spread of the technology of modern growth depended on the learning potential and motivation arising from the development of schooling. Thus economic history, together with the recent econometric research, confirms the belief that investment in education can contribute to economic growth.

Husen and Postlethwaite(1994:1781) also assert that the rational for investing in education has an impact on achieving intended social goals by improving productivity of individuals, improving health conditions and in most cases by increasing the income of individuals.

However, maximum utilization of the resources allocated to the education sector is only possible by increasing the efficiency of the system. Efficiency is the comparison of inputs to the results or outputs related to the inputs. Other things being equal, the more a system becomes efficient the higher is the output for a given set of inputs. The application of the concept of efficiency to education can be viewed from two perspectives: external and internal

efficiency. External efficiency refers to the comparison of social costs and social benefits. The major concern of this paper is, however, to assess the problems of internal efficiency in education and will be treated in detail hereafter.

Internal efficiency, according to Husen and Postlethwaite (1994:1780), refers to "a comparison of learning (a non-monetary outcome of education) to the costs of educational inputs". Internal efficiency uses both qualitative indicators like cognitive and non-cognitive test scores and quantitative indicators like the measurement of output by the number of successful completers of a given level of education (Psacharopoulos and Woodhall, 1985). In most cases, as it is difficult to measure the qualitative indicators, the quantitative indicators are used to measure the internal efficiency of an education system.

Internal efficiency of an educational system is expressed in the rate of repetition and dropouts. Repetition refers to the spending of one or more academic years in the same grade level studying the same content. While dropout is a situation in which students abandon learning before the completion of a certain grade level or cycle.

Repetition and dropping out are serious problems, especially for the developing countries, because they increase the cost of educational investment. Baum and Tolbert (1985:135) express the amount of cost incurred due to repetition and dropout as follows:

About 15 to 20 percent more children of primary school age could have been admitted to school, without any increase in cost had there been no grade repetition. Dropout rates are likewise high. Together, repeaters and dropouts consume scarce resources with low returns to the individual or the society.

In whatever form it may exist, educational inefficiency has been a serious problem in many parts of the world (Simmons, 1980). The problem of educational inefficiency, occurring in the form of repetition and dropping out is also a problem in Ethiopia. Reducing the rate of repetition and dropping out is the basic measure of increasing the efficiency of the educational system because an educational system that is characterized by inefficiency will not bring intended developments to the society or the country at large.

1.2. Statement of the Problem

Inefficiency of the educational system has been a serious problem all over the world. It has been said that education is an important sector that adds up to multifaceted development of a country. The realization of the objectives of education, however, is affected by the presence of dropouts and repetitions. Repetition and dropouts are serious problems to the efficiency of education because they reduce the size of enrollments and increase the cost of running the system.

The problem is more serious in the developing countries. Like all other developing countries, the primary schools in Ethiopia have suffered a serious

problem of internal inefficiency, which has remained as a major factor that reduced the number of literate citizens in the country.

Since 1991, with the formulation and implementation of the new education and training policy, enrollment has consistently increased and reached 61.6% in 2002. This shows a considerable growth in the rate of enrollment. However, the number of students who repeat or dropout the system is also alarming. The 2001/02 ESDP report (2002:16) shows that the national average of repeaters and dropouts was 9.7% and 16.2% respectively. This problem further increases towards the lower grade level, especially, grade 1 and in rural schools. According to a recent data of the Ministry of Education, the national average of dropout in grade 1 was 27.5% in 2002. Similarly when we compare urban and rural schools the rate of repetition and dropout is relatively higher in the rural primary schools than the urban primary schools.

Similar to the national situation of educational performance, the condition of education in Tigray region is characterized by higher rate of repetition and dropouts. This region is the most affected by war and drought. But after the end of the war, the expansion of education was significant. The number of primary schools has dramatically increased both in urban and rural areas. This has increased the number of students enrolled. But, the schools are also characterized by high rate of dropping out and repeating students. According to a report by the Tigray Regional education Bureau (2003:6) the rate of repetition and dropout was 8.04 per cent and 25 per cent

respectively for the 2001/2002 academic year. This rate of repetition and dropout is higher than the national average.

The statistical abstracts of the Ministry of education also show that the situation of repetition in rural primary schools in Tigray is increasing from year to year. It has consistently increased from 3.8 per cent in 1999/2000 to 5.0 per cent in 2002/2003 (MOE, 2000; 2001; 2002; 2003). The number of repeaters in the rural primary schools also shows that repetition is higher among girls as compare to boys. The average rate of repetition for the years between 1999/2000 and 2002/2003 was 3.6 per cent for boys and 5.5 per cent for girls (Ibid).

Such evidences indicated that there is some degree of inefficiency in the primary education system of the region, which calls for a close investigation of the factors that cause dropouts and repetition. The purpose of this study was, therefore, to examine:

- the extent of inefficiency in rural primary schools,
- the relationship between pupils' socio-economic background and the internal efficiency of rural primary schools,
- the relationship between in - school factors and internal efficiency of primary schools.

In view of the above-mentioned points, this study had tried to answer the following basic questions.

1. What was the magnitude of internal efficiency of primary schools in Tigray?
2. What were the major causes of internal inefficiency?
3. Was there any association between the background of the students and internal efficiency of the schools?
4. What were the in-school factors that affect internal efficiency?

1.3. Objectives of the study

1.3.1 General Objectives

The general objective of this study was to investigate those factors that affect the internal efficiency of rural primary schools in Tigray region.

1.3.2. Specific Objectives

- To explore the level of inefficiency in primary schools in the region.
- To investigate the factors those adversely affected the internal efficiency of the schools.
- To forward some relevant recommendations to the identified problems.

1.4. Significance of the Study

This study was basically designed to investigate the problems of internal efficiency in the rural primary schools in Tigray region. Moreover, the findings of this study are expected to have the following values:

- Internal efficiency is a serious problem especially for countries like ours that are suffering from capital shortages. This study will therefore

serve as a ground to assist planners and policy makers to assess the problems of internal efficiency in primary schools and make effective use of resources.

- It may help to enrich the literature related to problems of internal efficiency in schools.
- The finding of this study may also serve as a reference material and initiate researchers who wish to investigate the situation in a broader scope.

1.5. Delimitation of the Study

Tigray region is one of the regions that is having a consistently increasing rate of enrollment next to Addis Ababa and Dire Dawa. Addis Ababa and Dire Dawa are urban areas that make them different from Tigray region, where most of the schools are located in rural areas. For this reason, this study is delimited to assessing the internal efficiency of the rural primary schools in Tigray, which are characterized by higher rate of enrollment.

1.6. Limitation of the Study

This study was aimed at identifying the factors that affect the rate of repetition and dropping out of school. The information that could be collected from repeaters and dropouts could have given a real impact of the factors that affect the rate repetition and dropout. But the researcher was not able to get especially the dropout students. This may have to some extent limited the research findings.

1.7. Definition of Terms

Complete primary School – according to the educational and training policy complete primary refers to a school with grade 1 to 8.

Dropout - A dropout is the pupil who leaves school before the completion of a given stage of education or leaving at some intermediate or non-terminal point in a cycle of schooling.

Inputs: The human as well as non-human resources that enable a system to function. It includes students, teachers, managers, instructional materials, physical facilities and equipment of various sorts.

Internal Efficiency: a comparison of the costs of educational inputs and the outputs of the educational system.

Outputs: include all the acquired learning, skills, insights, attitudes, and styles of thinking that students carry away from the educational system beyond what they brought to it.

Repetition- is a situation where pupil who is enrolled in the same grade for a second (or further) consecutive year.

1.8. The Research Design, Methodology, Sources and Instruments of Data Collection

1.8.1. Design and Methodology of the Study

This study has employed a descriptive survey method to help reveal the current situation of educational inefficiency in the rural primary schools of the Tigray region. For this purpose, relevant and related literature was reviewed. Data regarding pupils' enrollment, repetition and dropping out were gathered from Tigray Region Education Bureau and school documents. In addition to this, students, teachers and principals were used as a source of information.

1.8.2. Sampling

1.8.2.1. Sample Population

The main purpose of this study was to investigate the problems of internal efficiency in rural primary schools. It is, therefore, important to collect relevant information from appropriate sources. For this reason the sample population that was used as a focus of this study included students, teachers, and school principals.

1.8.2.2. Sampling Techniques

In order to ensure a fair representation of the schools, simple random sampling technique was employed to select schools that are included in the survey. According to the Tigray Regional Education Bureau annual statistical abstract (2002:15), there were 127 rural schools, which had grades

1 to 8 in the 2001/2002 academic year. The sampling technique was done in a way to keep equal representation of the schools. Accordingly the researcher had used the zonal classification as a base for the sampling procedure. Tigray region is divided in to five zones. Mekelle, the capital of the region is one of the zones. Because this zone is an urban area it was excluded from the study. Then the schools were stratified according to their location within the zones. A quota was given to these regions and accordingly two from each zone, a total of eight schools were selected as samples for this study (Appendix 5). This accounted for 6.3% of the total school number. Then two schools from each zone were selected using simple random sampling.

These schools had a total of 395,014 students in 2001/2002 academic year. A total of 400 students, 50 students from each sample school were selected using simple random sampling technique.

The study also included primary school teachers. There are 4,166 teachers teaching in the rural primary schools. From the total number of teachers 120 (about 2.9%) were randomly selected. The principals of all the sample schools were also taken as samples for the study.

Variables to be included in the study were the following

1. Independent variables

- i. In school characteristics
- ii. Socio-economic background of students

- iii. Pupils' personal characteristics

2. Dependent variables

- i. Dropout
- ii. Repetition

1.8.3. Instruments and Sources of Data Collection

The procedure used to collect data for the study was totally based on the information that was obtained from primary data sources. The primary data source included responses of students, teachers and school principals collected using questionnaires. In addition, data was collected from official records from the Ministry of Education, the Regional Education Bureau and the sample schools.

The research questionnaire was the main data-gathering tool that was extensively used so as to obtain sufficient primary data. The questionnaires were distributed to the sample respondents, which included 400 students, 120 teachers and all the school principals of the eight selected sample schools.

The research questionnaire was designed with the purpose that respondents are able to reply in writing. The questions were prepared in a closed form to make the task of filling the questionnaires simple for the respondents. The questionnaires were prepared in two languages. The questionnaire that was distributed to the students was prepared in Tigrigna assuming that it would provide utmost opportunity to establish adequate

understanding between the researcher and the respondents. While the questionnaires distributed to the teachers and school principals were prepared in Amharic because these respondents have a relatively better command of the language.

To check whether the questionnaires were able to meet the objectives of the study, a preliminary trial of the questionnaire was carried out in a school located around Mekelle. 20 students, 10 teachers and 1 principal were given the questionnaires to collect a feedback that would be used to make required modifications before they were finally distributed to the sample population. The questionnaires were collected back and some corrections were made to the questionnaires based on the feedback collected from this trial.

1.8.4. Data Analysis and Presentation

After the necessary data was collected, careful tabulation, analysis and interpretations were made. Frequencies, percentages and other statistical tools like spearman rank order correlation and mean scores were used to analyze and interpret the information obtained from the respondents. The related literature organized in chapter two of this study was also used to underpin the results found through questionnaire.

1.8.5. Organization of the Study

This paper contains four chapters. Chapter one includes the study and its approach. Chapter two deals with the review of the related literature. In the third chapter, the presentation, analysis and interpretation of the data presented. Chapter four contains the summary, conclusion and recommendations of the study.

CHAPTER TWO

2. Review of the Related Literature

2.1. Efficiency of an Education System: Overview

Education is one of the sectors that require a substantial investment. Educational investments are done in the hope of an economic growth through the development of human capital. Human capital, according to Adams (2002:20) is one of the components that are determinants for economic growth by contributing to the improvement in the quality of labor force. Besides, it is believed that it brings high literacy and numeracy, which are fundamental requirements for "creating a competitive workforce and a nation of effective parents and active citizens"(UNESCO, 1998:5). For such reasons, countries have consistently allocated a huge amount of financial as well as human resources to this sector.

But the high rate of investment in education was not able to bring about the expected outcomes due to the problems of efficiency in the system. The term efficiency, which is commonly used in economics, is used to describe the relationship between the inputs allocated to an education system and the output that results from the use of such inputs (Psacharopoulos & Woodhall, 1985; Simmons, 1980).

According to Burkhead, et.al (1967:4), "an educational system may be said to be efficient if the quantity and/or quality of educational outputs are at a

maximum from the use of a given volume of input". The quantity refers to the rate of enrollment while the quality refers to the standard of educational provision, which enables the students gain appropriate skills, knowledge and attitudes.

When the concept of efficiency is applied to the education system, it would be necessary to use the term production function to analyze the relationship between inputs and outputs. It is only by comparing inputs and the expected outputs that we can measure the economic feasibility of the whole education system. The production function, in an education system, is used to relate educational outputs (such as student achievement) to the different types of inputs used by the education system like student characteristics, family background and school related factors, to mention some. The problems of measuring efficiency in education, however, are considerably difficult. This arises mainly from difficulties in measuring educational output, as well as from quantifying the relationship between inputs and outputs. How educational output is measured depends, of course, on the nature of the objectives of the educational system (Tsang, 2002:5).

2.2. Internal and External Efficiency

Efficiency can be seen from two perspectives: internal and external efficiency. Internal efficiency of education is concerned with the provision of more education to produce a given output by using less input of resources (Tsang, 2002:5). Internal efficiency of an education system is concerned with the

relationship between the inputs and outputs of an education system. Coombs and Hallak (1987:9) elaborate the definition of internal efficiency as follows:

It refers to the relationship between a system's (or subsystem's) outputs (learning achievements) and the corresponding inputs that went in to creating them. Internal efficiency may be judged in terms of its cost effectiveness, with effectiveness measured in this context by the systems immediate outputs as distinct from its ultimate benefits.

Inputs are the various elements that enable the education system to properly function. Inputs include the human resources which includes teachers, educational managers, students and non-human resources like: educational materials, buildings, different machineries and equipment that are required for the normal function of a teaching – learning process that takes place in a school. Education output, on the other hand, refers to the expected results of the objectives of the system mainly student achievement. The knowledge, skills, attitudes and exposures the students acquire from the schools are indicators of the output of an education system. (Coombs & Hallak, 1987:7-8, Psacharopoulos & Loxley, 1985:68).

On the other hand, external efficiency refers to the attainment of social goals or objectives. It measures, as mentioned above, not the 'immediate output but the ultimate benefits' that are gained by passing through the system. External efficiency of an educational system is realized through the relevance of education to socio-economic conditions of a country. The ability of graduates to enter the labor market following the completion of education

can be seen as an indicator of educational efficiency (Tsang, 2002:9). Different from internal efficiency, external efficiency measures not the output but outcome of an education system. Here outcome of an education system refers to the "external effects of outputs, the ability of people to be socially and economically productive"(Psacharopoulos and Woodhall, 1985: 205). Since the objective of this research is to study the internal efficiency of schools, the major emphasis will be given to the problems of the internal efficiency of the education system.

2.2.1. Internal Efficiency Vs Educational Wastage

As mentioned above internal efficiency of the education system examines the success of a school system in enabling individuals to complete a certain level of education that makes them functional literates. Internal efficiency is sometimes taken as having the same meaning with wastage in education. But wastage is in some way different from internal efficiency. Internal efficiency refers to the completion rate of a given age cohort that was admitted in a given year. It tries to measure the success of a given number of students in completing a specified educational level or cycle. Repetition and drop out of school that reduce the number of successful completers is the concern of internal efficiency. This means internal efficiency only focuses on children that are already in the school system. Wastage, on the other hand, also includes those citizens who have not got the chance of being admitted to school. According to Brimer and Pauli (1971:9) educational wastage exists in the following forms:

learning, skills, insights, attitudes, styles of thinking" that the students have gained from attending school. It is quite necessary to measure the output of an education system because this shows how efficient the system is. There are two indicators that are used to measure the output of an education system. These are the quantitative indicators and the qualitative indicators of output.

2.3.1. Qualitative Indicators of Educational Output

Measuring the qualitative indicators of educational output is more complicated and difficult. It refers to literacy and generic skills, good citizenship, personal development, positive attitude towards learning, healthy behavior and the like as measured by tests and examination results (Psacharopoulos and Woodhall, 1985:208, UNESCO, 2002:10;). Measuring the capability of students, however, is very difficult for it needs a very strict and standardized measurement of results. Students come to school with widely differing individual, social as well as cultural backgrounds. The value added to each individual student by the school can therefore be different as much as the difference of the background of the students. The way students learn and the amount of knowledge and skills they acquire from school can vary depending on their personal characteristics. This condition makes the assessment of the performance of schools in terms of qualitative measures very difficult. As put by Coombs & Hallak, (1987:8) qualitative indicators do not show:

.... how well student learning matched the system's objectives, and how well the objectives matched the real learning needs of the students and the society. But how

much the students learned, as revealed by final examinations.

For this reason, qualitative indicators are not commonly used to measure output of an educational system. Instead the quantitative ones are used as indicators for measuring educational outputs.

2.3.2. Quantitative Indicators of Educational Output

Quantitative indicators of educational output measure the number of successful students who complete a given grade level or cycle. A system that is able to retain all the students who are enrolled in a given year is said to be efficient. However, there is still a problem with the effectiveness of such indicators in accurately measuring the abilities and competence of individual students, which is very relevant to the objectives of the education system. Quantitative indicators may give a clear picture of the amount of cost incurred by comparing it with the number of students held by the system. The more students repeat or drop out of the system, the greater will be the cost because students who are attending the same grade level twice or more use some resources that would have been used for other needs. It can therefore be said that the quantitative indicators of educational output focus on possibilities of reducing the rate of dropping out and repetition.

2.4. Problems of Internal Efficiency and Forms of Its Existence

A major concern of all countries that are investing on education is to ensure that all children have an opportunity to get access to basic education. Since

the amount of resources allocated is usually insufficient, a wise use of these resources would be of paramount importance. Contrary to this, most of the world countries are having a serious problem of inefficiency in using these resources due to repetition and dropouts. The degree of efficiency of an education system is measured by the rate of repetition and dropouts.

2.4.1. Repetition as a Problem of Internal Efficiency

2.4.1.1. Repetition: Definition of the Term

Repetition is a situation where a student takes more years than it is prescribed by the policy of a country to complete a given educational level and objective. Premier and Pauli (1971:18) define repetition as "a year spent by pupil in the same grade and doing the same work as in previous years".

The definitions related to repetition, however, are not refined to specifically denote the right meaning. They are rather related with personal perceptions of the phenomena. Torres (1995:3) emphasizes that grade repetition is wrongly assumed as "internal solution" to avoiding poor learning achievement. UNESCO (1998:16) also explains this fact as follows:

In a majority of countries, both developed and developing, educators require pupils to repeat grade in order to give them additional time to learn material that they failed to master the first time round. Repetition is taken as a remedy to slow learners.

Torres (1995:4) further criticizes the way repetition is perceived by the society in general and the education community in particular. She explains repetition as

a phenomenon that is accepted as "natural" and innate element of the school system. It is considered by the school system as "a regular mechanism to cope with the diverse and complex intra - and extra - educational factors that inhibit effective teaching and learning in school".

This is, however, commented to be a wrong assumption and affecting the repeaters negatively the other way round. Watkins (2000:91), on the other hand, considers repetition as a result of inadequate quality of teaching provided to the children to meet the requirements needed to pass to the next grade level, rather than a problem of the pupils themselves.

2.4.1.2. Costs of Repetition

Various literatures discuss that repetition creates a problem and affects both the individual repeaters and the society at large. The effects of repetition can range from the psychological and socio-emotional problems that the individual learner experiences, which is manifested in the form of problem of low self-esteem and a negative attitude towards school, to a serious financial expenditure that can drain the resources of a country that would have been used to finance other development programs (Alexander et. al, 1994:19, UNESCO, 1998:23; Watkins, 2000:92).

The social problems of repetition are expressed as problems that affect the individual learner as well as expectations of both at family level and at society level. Repetition in early grades can cause a problem for further retention that would finally lead to dropping out (UNESCO, 1998:14). Cognizant of the

financial resources that is wasted due to repetition, Alexander (1994:25) explained the social consequences of repetition as follows:

Beyond costs calculated in dollars, there also may be psychological costs involving self-esteem and personal happiness. These costs are born by both children and families - parents because dreams for their children are compromised, and children because they grow to see themselves as failures or misfit.

Repetition creates a negative impression on the expectation of parents regarding the academic performance of their children. They associate the repetition of their children with a low academic performance, which may not be improved in the future. Torres (1995:5) also explains the social problems that are associated with repetition as follows:

Socially, repetition reinforces the vicious circle of low expectations, low achievement, low self-esteem, and failure. Parents take their son's or daughter's low grades as an indication of their child's incapacity to learn; repetition fuels parents' own low expectations regarding their children, their education and future.

The significance of repetition results from its consequences. From the economic viewpoint, it is obvious that repetition can considerably increase the cost of education because of the resources spent on forcing pupils to repeat their grades. In poor countries this may prevent the universalization of basic education, while in others the extension of secondary or higher education to meet the needs. The economic costs can be felt both at family level and country level. Bremier and Pauli (1971:44) emphasized that, "every school

place occupied by a repeating pupil is causing additional expenditure that would not be needed if he were making normal progress".

It is believed that repetition increases financial burdens to the society by increasing "the direct and indirect costs of education to the households"(Watkins, 2000:90). At national level, it has a serious impact on financial costs of a country. UNESCO (2002:46) emphasized the economic impact of repeating as a "serious drain on education system capacity". Repeating the same grade is a way of inefficiency because it increases the cost of educating a pupil without increasing the output, the graduates (UNESCO, 1998:25). It further stresses that "the resources devoted to a repeater could have been used to admit another child to the system or improve that quality of education for the already admitted ones".

Grade repetition increases the "per-capita cost of education". Under most favorable circumstances, each primary child is assumed to spend one year in each grade, finishing a four-grade cycle in four years. When a student repeats a grade, the average number of pupil year required proceeding through the cycle increases. This requires additional money to cover the same material that should have been completed within the specified time. As the data collected by UNESCO (1998:25) shows the total cost of repetition for the year 1995 was about US\$6 billion for all regions together.

Grade repetition also affects the quality of educational provision by increasing class size in schools. The average class size in schools differs from place to place based on the proportion between the number of children to be

admitted and the available number of schools in a given year. When children repeat grades, schools will be forced to increase the class size beyond the specified average to accommodate the demand of both new entrants and the repeaters. This would have its own impact on the quality of education.

Another problem which grade repetition causes is age incompatibility between students admitted to a given grade. Students that repeat a grade once or more increase the age limit of a specified grade level by the number of times they repeat. This brings an age gap between the students admitted to a given grade level, creating a physical as well as psychological or emotional differences among the students.

Grade repetition has a more serious impact in poor families and may force the children to completely dropout. When students repeat a grade the educational expenses that the household should cover increases. The financial burden that arises as a result of repetition discourages parents and may push students to dropout. A study made by Suliman (2002:7) states that in Egypt "dropout rates are significantly four times higher among students who ever failed/repeated a grade, thus indicating that grade failure/repetition derive students to dropout".

2.4.1.3. Measures for Reducing Repetition

It is discussed above about the multi-faceted problems that appear as a result of grade repetition. The economic consequences are the most significant problems that are clearly felt by most world countries, especially the developing countries that are failing to have sufficient financial capital to

achieve their goals of universal basic education programs. Many countries have tried to tackle the problem of grade repetition through various ways, of which the one is implementation of automatic promotion in lower grades.

Many authorities in the system have varied views about the implementation of this policy. Some authorities support the implementation of automatic promotion as the only solution to the current problems of repetition the education system faces. While the other major oppositions of implementing it raise the issue of quality of education that may face a problem as a result of passing pupils who are not performing as much as the prescribe curriculum requires.

2.4.1.4. Automatic promotion Vs Student achievement

The problem of repetition is a complex one. The reasons for repetition are not uniformly defined and different reasons are given to repeating students. The one which commonly to be the major precondition is the poor academic results that lags behind the required level. This can bring about a question to the quality of the evaluation of performance of the student. Teachers are, in most cases and in all countries, the ones that have the authority to decide on the fate of students (Torres, 1995:5; Watkins, 2000:91).

To minimize the rate of repetition, many countries have adopted an automatic promotion system. This, however, has not become a solution to solve the problem because it only avoided repetition but is not solving learning

difficulties of the children. Watkins (2000:91) emphasized the shortcoming of automatic promotion as follows:

Some countries have tried to reduce repetition rates through a policy of automatic promotion. The problem is that, in the absence of a supportive teaching environment, automatic promotion amounts to a policy of problem displacement.

People who oppose automatic promotion say that it has detrimental effects on the motivation of students and teachers (Torres, 1995:6). Students have no incentive to work hard and, as a result, the quality of education becomes poor. In some instances, in a situation where this system is applied, a proportion of pupils are still functionally illiterate at the end of the third or fourth grade. People who have not successfully completed the materials to be covered in a specific grade may not be able to cope up in the next higher level. So it would be necessary to devise mechanisms that can actually help the student to succeed in his studies (Eisemon, 1997:29; King et. al, 1999:9; UNESCO, 1998:26).

Adane (1993:187) also explains the shortcomings of implementing the system of automatic promotion as a solution to reducing repetition. However, he agrees that the provision of quality education by improving the mechanisms of student assessment and increasing the qualification of teachers can make the use of automatic promotion effective. So it is very critical to improve the above-mentioned elements before implementing automatic promotion.

2.4.1.5. Global Incidence of Repetition in Primary Schools

Repetition is a worldwide problem, which existed since long ago. All developing countries have a problem of high rate of repetition. Torres (1995:2) has tried to summarize where repetition rates are lower or higher using a map of repetition by identifying different reasons for the existence of repetition. The following table shows Torres' international map of repetition.

Table 1.
The International Map of Repetition

Higher Rates	Lower Rates
• Developing Nations • Rural areas • Minority students or those studying in multi-lingual contexts • Students from economically deprived sectors • Students whose parents have very low levels of literacy, especially mothers • High absenteeism • Teachers with low expectation of students • Schools with limited contact hours.	• Developed nations • Urban areas • Students from mainstream groups or whose mother tongue is the same as the national language • Students from economically non-deprived sectors. • Students whose parents have high levels of literacy, especially mothers • Low absenteeism • Teachers with high expectations of students • Schools with longer contact hours

Adapted from Torres, 1995.

As different from the above classification of high or low rate of repetition, there are some areas where studies have not yet brought conclusive evidence as regards to the rate of repetition. There is no a clear pattern, for example, in the

difference of the rate of repetition among boys and girls. Early childhood and preschool education; presence or absence of home works and availability of textbooks have showed no conclusive evidence in affecting the rate of repetition (Torres, 1995:1-2).

The geographical distribution of the global incidence of repetition indicates that there is a higher rate of repetition in the developing regions than the developed ones. When comparing only the developing countries, the rate of repetition is said to be very serious in Latin America. According to Watkins (2000:91), almost 30% of students enrolled in Latin America repeat the same grade. This has incurred the region an additional cost of \$4 billion. Other reports (UNESCO, 1998:17) also show that Sub-Saharan African countries have a relatively higher rate of repetition. According to this report, based on 1995 data of repeaters, Sub-Sahara African countries have an average of 16% rate followed by Latin America and the Caribbean with a rate of 13%, Arab States 8%, Southern Asia 7% and Eastern Asia/Oceania 3%. This figures show that all regions have shown an improvement in reducing the rate of repetition as compared to 1985 where the average rate of repetition for the less developed regions has diminished from 10% in 1985 to 8% in 1995 (UNESCO, 1998:17). But the rate of repetition in some individual developing countries is still increasing. According to another report by UNESCO (2002:30), for example, in some African countries like Congo, Gabon, Angola, Central African Republic and Madagascar, a third of the enrolled students repeat in the same grade.

2.4.2. Dropout: Another Problem of Internal Efficiency

Dropping out is a condition in which a student leaves out a school before completing a given level of the education system. Briemer and Pauli (1971:15) define drop out as "a pupil who leaves school before the end of the final year of the educational stage in which he is enrolled". They further emphasize that completing a given level but failing to continue to the other higher level of a school system does not constitute a dropping out condition.

There are three categories of theories that explain why dropouts abandon school. The classification includes both the in school and out of school reasons for dropping out. These categories are "drop-out", "pull-out," or "push-out" theories (Glennie & Stern, 2002:10).

"Drop-out" refers to attributes of the individual that precipitate early school departure. Factors like readiness and attitude of the student, health problems, and malnutrition are examples of the theory. This theory considers student personal characteristics as factors for dropping out of school.

The second theory is the "pull-out" theory, which refers to factors that make students to measure the cost and benefit of staying in schools. Employment opportunities are examples of pullout factors that attract students to dropout of school. Some other reasons like family liability that may be exceptionally felt by students are considered as pullout factor.

The third one is the "push-out" theory. This theory focuses on school factors that dispirit students from continuing with their education. Unattractive school conditions, policy irregularities are some of the examples that can act as push factor to students. The tendency for students to drop out is also associated with their school experiences like: dislike of school; Low academic achievement; retention at grade level; A sense that teachers and administrators do not care about students; and inability to feel comfortable in a large, depersonalized school setting (U.S. Department of Education, 1999:31). In school factors that deter the attendance of students can be categorized as 'push out' factors.

The first and most important reason for dropping out, especially in the developing countries is the 'pull out' factor. The need for having a time that would be used to sell the labor and in return get a means of subsistence in which the family or the individual would depend on has contributed to a greater proportion of school dropouts. This may be seen as an economic advantage at the individual or family level. This is more elaborated by Suliman (2002:3) as follows:

The time allocated for school attendance is input in the education process, which could be used to participate more fully in the labor market or home production, and therefore school time represents forgone earnings or gains to households—an indirect cost of education.

In addition to the time demand for the students, families are also required to cover other direct cost expenses that are used to cover the schooling costs of their children. A direct cost includes the cost expended to buy school uniforms,

2.4.2.1. Consequences of Dropping Out

Similar to the problems grade repetition causes, dropping out also has a negative impact on the economy as well as individual benefits. It was discussed earlier that education brings about a behavioral change to students. It helps individuals acquire new skills and knowledge that would be employed in improving the life of human beings and their environment. The skills and knowledge a country's workforce gains enormously influences its ability to increase its creativity and productivity and as a result compete with other countries in a global economy. High school dropouts relatively lower levels of productivity, and reduces the national income (Glennie & Stearns, 2002; Rumberger, 1987;).

The economic costs of the dropout problem are very significant not only to the person who drops out but also to the society at large. Industry needs skilled workers and the productive capacity of educated workers. Industry suffers when students drop out of school. With the eminent growth and sophistication of industries, employees who have sufficient technical knowledge are highly required. Students who dropout early may not be able to acquire such skills and they remain unfit to the modern production systems. This also limits the incomes of dropouts as compared to educated ones. Because of their diminished earning power, dropouts as a whole make a proportionately smaller contribution through taxes (Bredfeldt, 2002:5).

The problem of dropout also affects the individuals who leave schools before they complete a certain education level. Not completing may mean losing the skills and knowledge that might have been used to be employed better and earn better incomes. As the pool of dropouts continues to grow, employment opportunities for them are more limited, because today's economy requires of the labor force increased literacy, more education, enhanced technological skills, and lifelong learning (woods, 1995:3). As a result, school dropouts have a lower likelihood of participating in a more productive and beneficial work positions that could have brought a high level of income. Glennie and Stearns (2002: 5) stressed that:

dropping out of school has negative consequences for individuals throughout their lives. In an economy where education largely determines pay and occupation, high school dropouts hold a disadvantaged position. Without credentials and training, they are less likely to participate in the labor force than other adults, and if they are able to find paid work, they often become mired in low-wage jobs with few advancement opportunities.

Dropout may also bring negative social consequences. There are cases where dropout youth become involved in activities that are considered as evil by the society. Studies show that most dropouts from higher-grade levels tend to have a higher level of alcohol consumption and as a result poor mental and physical health. Dropouts, if they are idle, may have greater likelihood of committing criminal acts and a higher probability of becoming dependent on family and government welfare than people with higher educational attainment. In general, the rate of engagement in high-risk behaviors such as premature sexual activity, early pregnancy, delinquency, crime, violence,

alcohol and drug abuse, and suicide has been found to be significantly higher among dropouts (Rumberger, 1987:9, woods, 1995:3).

2.5. Causes of Internal Inefficiency in Primary Schools

It is discussed above that repetition and dropout are the major problems of internal efficiency of the education system. The causes for the existence of problems in internal efficiency can be varied in their nature. But they can be grouped in to two major categories as factors that originate within the school or factors that have their origins out of the school environment.

2.5.1. In- School Factors

In school factors are all the factors that affect student learning and are found within the school environment. In-school factors include those things relating to available material resources within the school. It refers to the physical setup of the school environment and the human characteristics that have close relationship with student learning. For instance, class size, school location, the availability of suitable school facilities, qualification and training of teachers are some elements that are considered as in school factors that have an impact in student learning and as a result can be cause for repetition and dropping out.

2.5.1.1. Class Size

Building of school infrastructures is one of the elements that make educational investments expensive. In developing countries where there is a limited resource to be allocated to the education sector, most schools are forced to operate over their capacity. Classrooms accommodate more than what they have to hold. This creates a difficult situation for both students and teachers. Students have to learn in a room, which does not have comfortable class environment, suffocated and warm, that limits student learning. For teachers, bigger class size will result in unmanageable condition.

As mentioned by Adane (1993:72), class size has a considerable influence on the performance of especially lower grade students for they need more assistance and closer attention from their teachers. This is likely to be effective in a situation where the class size is convenient enough for the teacher.

Research in the primary grades shows that as class size shrinks, opportunities grow. Class size reduction has led to numerous benefits, which have a lasting impact up to the completion of high schools. Reducing class size increases achievement of especially poor and minority students. It enables teachers to give greater progress. Improved identification of special needs of students that allows earlier intervention is only possible when teachers have a closer relationship with their students. This becomes practical when the class size is manageable enough to enable teachers have a detailed information and knowledge of their students. Others also emphasize the advantages of reducing class size as a key factor in reducing classroom discipline disruptions.

Once the teacher gets an opportunity to study the behaviors of his students, he/she will be able to understand their problems and get prepared to resolve the problems and control the classroom environment. Other factors like faster and more in-depth coverage of content; reduced classroom stress and greater enjoyment of teaching are also mentioned to be the benefits of smaller class size (U.S. Department of Education, 1999:3).

Studies suggest that students who start their education in small classes are less likely to dropout, more likely to graduate on time, take more challenging lessons and are more likely to attend college than their peers from large classes. Students in small classes participate more in school and have fewer discipline problems. They have more opportunity to work with others to solve problems and take responsibilities within their classrooms (Elementary Teachers' Federation of Ontario, 2002).

Contrary to these findings other authorities say that there is no relationship between class size and student performance. Evidences show that the performance of students is not affected much by the class size. Even bigger class sizes, if managed by good and qualified teachers, can be effective. Children's achievement largely depends on teacher qualification rather than class size. A thorough review of the scientific evidences provides no support broad programs of class size reduction (Hanushek, 1998:5).

2.5.1.2. School Location

School location has a significant role in the learning conditions of students. This has a serious disadvantage to students especially at the primary level where

students are younger enough to be affected by the distance they are required to travel from school to their residences and back to school every day. Tilaye emphasized the impact of distance on student learning as follows:

it is unfair to expect that a student who walks for one or two hours a day will follow his/her lesson regularly and effectively. Fatigue, boredom, thirst and hunger are dominant and these deter his/her active attendance in class.

In rural areas where schools are far from residence areas, there is a difficult situation for girls who are threatened by the dangers of rape and early pregnancy. In most societies, distance is inversely related to the prospects of girls going to school, especially after puberty. In addition to this, increased distance to school may add many hours to the time away from home thereby increasing opportunity costs (Watkins, 2000:193). This has a more serious impact on females than male students. Anticipated dangers that happen to children on the way from home to school may be factors that increase the rate of dropping out.

2.5.1.3. School facility and Material Supply

Good facilities appear to be important to student learning, provided that other conditions are present that support a strong academic program in the school. A growing body of research has linked student achievement and behavior, as well as staff morale, to physical building conditions. A study conducted by Edwards (1992:5) confirmed that, other variables such as a student's socioeconomic status remaining constant, students' standardized achievement scores were lower in schools with poor school facilities like

classroom buildings. Students who are attending classes in school buildings that are in poor condition had an achievement that was 6 percent below schools in fair condition and 11 percent below schools in excellent condition.

Other studies (Cash, 1993:5; Hines, 1996:11) have also emphasized the quality of school facilities like classroom buildings and furniture, science laboratories and noisy external environments have a significant impact on student learning and achievement. There is a body of research in the area of school facilities and their relationship to student and teacher attitudes. Stockard and Mayberry (1992:17) found that the quality of a physical plant or environment is related to non-cognitive outcomes, such as better attitudes toward school. These outcomes may eventually relate to higher academic achievement. They have concluded "human nature makes people feel better about themselves when their surroundings are pleasant". Students who have better attitudes usually learn more and work harder.

2.5.1.4. Qualities of the Teacher

2.5.1.4.1. Teacher Qualification and Experience

There is a substantial literature on the relationship between teacher characteristics and student learning. Most prior research on the topic has focused on teachers' educational background, years of teaching experience and salaries. Although the results of such works are not uniformly supporting the positive relationships, most research findings indicate a positive relationship between teacher training and student performance (Jacob & Lefgren, 2002:33; Kubitskey, 2002:10). Teacher qualification appears to be causally

related to improved student achievement: certified teachers produce higher student achievement than non-certified teachers. Research findings regarding the relationship between teacher characteristics and student achievement seem to suggest that verbal skills, quality of educational qualifications, and teaching experience are associated with gains in student learning (Summers and Wolfe, 1977; Levin, 1969; Hanushek, 1981; Glass, 2000:11).

Subject matter knowledge is another variable, related to teachers' qualification, that one might think could be related to teacher effectiveness. While there is some support for this assumption, the findings are not as strong and consistent as one might suppose (Darling-Hammond, 2000:17). Studies have found a somewhat stronger and more consistently positive influence of education coursework on teachers' effectiveness. Ashton and Crocker (1987:4) found significant positive relationships between education coursework and teacher performance. Monk as quoted in Darling-Hammond (2002:21) clarifies that a study of student's mathematics and science achievement found that teacher education coursework had a positive effect on student learning and was sometimes more influential than additional subject matter preparation. He ✓ further explains that teachers with greater training in science teaching were more likely to use laboratory techniques and discussions and to emphasize conceptual applications of ideas, while those with less education training placed more emphasis on memorization. Emphasizing the advantages of having training in educational courses, Byrne (1983:14) suggests:

It is surely plausible to suggest that insofar as a teacher's knowledge provides the basis for his or her effectiveness, the

most relevant knowledge will be that which concerns the particular topic being taught and the relevant pedagogical strategies for teaching it to the particular types of pupils to whom it will be taught. If the teacher is to teach fractions, then it is knowledge of fractions and perhaps of closely associated topics, which is of major importance.... Similarly, knowledge of teaching strategies relevant to teaching fractions will be important.

The teaching experience of teachers is suggested by some studies important in increasing student learning. Teacher experience generally has shown to be positively related to student achievement when other variables are statistically controlled (Glass, 2000:21).

2.5.1.4.2. Teachers' Expectation of Students

Research shows that teacher expectations affect student learning. Students who are expected to learn are more likely to achieve in school. The expectations teachers have for their students and the assumptions they make about their potential have a tangible effect on student achievement. Brophy (1979:11) demonstrated that teachers who believe strongly that their students are capable of learning new skills or subject matter are more likely to be successful in increasing students' learning.

Students usually respond positively to teachers who believe that their students can learn. Bamberg (1994:10) emphasizes the problem associated with expectations formed by teachers "plays a significant role in determining how well and how much students learn." Those students who are highly expected by their teachers will be led to achieve at or near their potential, but low expectation students will not gain as much as they could have gained

(Cotton, 1989:4). Students associate their performance with the level of expectation they think their teachers have about them. Their performance increases or decreases as the expectation of their teachers' varies (Lumsden: 1997:7). Students who are specially coming from low socio economic status families, ethnic minorities, female students are the ones that are most affected by the problems associated with the expectation of teachers (Cotton, 1989:3). The expectations set by teachers mostly last long. They categorize students, for example, as low performing students ignoring the improvements they can show. However, even though the initial expectations formed by teachers may be realistic and appropriate, researchers have found that sustaining expectation effects can occur and can also limit students' learning and self-concept development (Cotton, 1989:3).

Teachers give due attention to students whom they expect are good performing students. They always focus on students who are expected by teachers as best students, ignoring the pupils who are considered by them as slow learners. Teachers develop a positive attitude towards students whom they have high expectation and devote most of their time in assisting them. Bamberg (1994:17) explains this situation as follows:

either consciously or unconsciously, teachers often behave differently toward students based on the beliefs and assumptions they have about them. For example, studies have found that teachers engage in affirming nonverbal behaviors such as smiling, leaning toward, and making eye contact with students more frequently when they believe they are dealing with high-ability students than when they believe they are interacting with "slow" students.

It is clear that students have a varied learning ability. But teachers' expectation may not be exactly related with the actual performance of the students, rather it is related with other factors that were mentioned above. Even the poor performance of the students is recorded in the minds of teachers as something that can never be improved. As lumsden (1997: 25) puts it "poor performance in school is often attributed to low ability, and ability is viewed as being immune to alteration, much like eye or skin color." This therefore discourages students that whatever improvement they may show their efforts are not considered as much as to change the expectations of their teachers.

2.5.1.6. School Timetable

School timetable is a very important factor that has an effect on increasing the rate of dropout in rural schools. In developing countries, where most people get their earnings from agriculture, it is natural that students tend to be absent from schools when harvesting time is at its peak. It is also common for many schools to loose many of their students where seasonal labor requirements are higher.

School timetables need to be flexible enough to accommodate such situation. For example, the timetable that is scheduled for rural schools and urban schools is always the same while the characteristics of the schools are completely different.

2.5.2. Out - of - School Factors

Out of school factors are those factors, which are arising out of the school's internal environment. But such factors are believed to have a strong effect on student learning. Attitude of students towards learning, age, sex, socio-economic background of the individual learners and his/her families, nutrition, health of the child and readiness are some of the elements that can be considered as out of school factors that have a detrimental effect on student learning achievement.

2.5.2.1. Attitude Towards Learning

Learning requires a prior psychological and emotional readiness of the student. Students have to have a positive attitude towards school if they are to be successful and to achieve the expected outcomes. The socio economic status of students has its own impact on the readiness of students. Pellino explained the impact of family socioeconomic background on the readiness of students towards learning as follows:

When considering the poverty factor as related to readiness, it is important to note that poverty is not just about money; it is about how an individual does without resources and with all of the baggage that goes along with being poor.

Several researchers have focused on family beliefs, values, and attitudes among low-socio-economic status households. The results of such research indicates that low- socio-economic status of parents who had "rigid, authoritarian beliefs about rearing and educating children" had a strongly negative influence on their children's achievement levels in reading (Renchler, 1993).

2.5.2.2. Preschool Education Experience ✓

Preschool education refers to education given to children before they begin formal schooling at elementary schools. The idea for the expansion of preschool education was more intensified in the early sixties where early education was considered as a key and a decisive element in future success of students.

Proponents of the expansion of preschool education system advocate that it increases educational readiness of students before they are admitted to elementary schools. One of the major advantages of preschool education is that it reduces the differences in cognitive development among children and increases social maturity. This greatly reduces the problems of educators that they encounter in children's first schooling experience. Good preschool experience helps students develop an interest in learning and helps them to be motivated to try new things. It further helps avoid behavioral problems for they will be able to identify unacceptable norms as much as to their level (Brandt, 1986:5; Shepard and Smith, 1986:78; Barnett and Hustedt, 2003:54).

Children with a preschool experience are better prepared for school both intellectually and socially. They will have an opportunity to acquire basic learning skills like identifying numbers and alphabets and have a better social interaction for they will be a member of their peer group they form in preschool institutions. Deighton (1987:141) emphasized the advantages of preschool education as follows:

Helps (children) acquire some of the knowledge, habits and attitudes, which would facilitate their successful adjustment to the elementary school situation.

Generally, students who have a preschool experience are expected to have a developed social and emotional status that contributes to self-confidence, self-expression, discipline, improved thinking and communication skills.

2.5.2.3. Socio-economic Status of the Family

2.5.2.3.1. Income Variations and Educational Status of Parents

Family background exerts a strong effect on student performance. Students from disadvantaged families and from families where the parents themselves have less education tend to systematically perform worse. The extent of participation of parents in school affairs and their impact on the performance particularly of their children is found to be correlated to their educational profile. This notion is found in the writings of Bremer and Pauli (1971), which read as "well educated parents involve more in school affairs and encourage their children better than those who are less educated ones".

Since the participation of parents, especially educated ones would bring new ideas and other inputs in to the school, and alternative solutions to problems pertinent to the education of their children, school efficiency would proportionately improve. This would certainly play an affirmative role in minimizing school wastage due to repetition and premature dropout. Low

economic and educational capabilities determine the ability of parents to provide their children with what is needed for them at school and at home. (Hanushek and Javier, 2001).

The income of parents is a major factor that contributes to attendance of students. The ability of parents to cover all expenses that are required by their children to attend schools has a strong relationship with the attendance at school and my influence later dropout. Boyle et. al., (2002:4) discuss the importance of impact of the costs of education as "for both the poorest and the slightly better off groups, the costs of education are the predominant reasons given for children in the household never having attended school".

Socio-economic status of the family affects the ability of students to perform well. Income is one indicator of the status of families. The ability of a family to provide their children with basic needs they require can have a direct relationship with learning. Attendance in school, the ability of students to concentrate in class and the habits of studying are dependent on getting a sufficient amount of diet they take at home, which requires a better income of parents. The more students have no a problem of nutrition, the higher will be the probability to them to concentrate on their schoolwork. Better-nourished children did significantly better in the mental ability test; specific tests of basic skills, such as Reading, Arithmetic and Communication Arts; and overall assessment of academic competence (Florencio, 1995:21, www.EdSource.org).

The relationship between availability of sufficient food supply and the ability of a student's school performance is described (www.edSource.org) as follows:

Hunger contributes to a child's distractibility, inattentiveness to environmental stimuli, and adaptive behaviors of passivity and inactivity. These effects are more apparent when the child who is hungry is also malnourished. The response to hunger directly impinges upon the development of a child's active learning capacity.

Other than its effects on the actual learning, coming from a family with low socio-economic status may make students lack confidence. Children coming from financially less distinguished families have less access to positive role models which can play a crucial part in fostering intellectual stimulation in particular fields. Children become aware of social and economic status differences at a very young age. They also grow increasingly aware of both their own social status and that of their peers, developing class-related attitudes during their years in elementary school (Pellino).

2.5.2.3.2. Parental Involvement and Expectations

The importance of effective parental involvement in school has been identified as a critical factor in the academic success of students (Lunenburg & Irby, 1998:3). It appears that parents who have high expectations for their children's attainment get involved in school activities and offer helpful home learning environments that influence the pupils' academic success.

A number of researchers have recognized parental expectations as a major factor to student performance in school and important element to student academic attainment. High expectations from parents are generally related with higher levels of educational performance. Effective parenting practices associated with high levels of academic achievement include expectations that children get high numerical grades on schoolwork. In addition, research suggests that child rearing attitude, provisions for academically elevating home environments and of acceptable behavioral standards in and out of school is equally important to academic achievement (Okagaki and Frensch, 1998, Wong, 1990).

2.5.2.4. Impact of Drought

The subsistence of most rural families of developing countries highly depends on agriculture. The status of agricultural production is, however, very undeveloped and is not in a situation to resist natural hazards that occur at different times.

Drought exerts a diversified impact in the society that ranges from economic problems where food scarcity is widely seen to social crisis that takes place in the form of deaths of family members and spatial dislocation from places where they have lived for a very long period of time (Mesfin, 1986:55).

The aftermaths of drought directly affects the provision of education in rural areas. In a situation where there is a sever shortage of food, it is obvious that students face a problem of getting sufficient amount of food. Students who do not get the minimum food requirement would have a problem in their

academic achievement at school. In addition, in a situation where a place is badly incapacitated by drought, people are forced to migrate to other places. In such instances students are forced to dropout of school.

CHAPTER THREE

PRESENTATION AND ANALYSIS OF DATA

This chapter deals with the presentation and analysis of the data collected from three groups of respondents: students, teachers and principals. While the first part discusses about the characteristics of the respondents and the second part deals with the analysis of the findings of the study.

3.1. CHARACTERISTICS OF THE STUDY POPULATION

A total of 528 questionnaires were distributed to 400 primary school students who were attending in grades 5 to 8, 120 teachers and 8 school principals. Of these questionnaires 98.5 per cent from students, 93.3 per cent from teachers and 100 per cent from the school principals were filled in and returned. These groups of respondents were included in the study mainly because they can give the required information needed for the study.

The characteristics of the respondents in terms of sex and age are indicated in Table 1.

TABLE 2
Age And Sex Distribution Of Respondents

ITEMS	FREQUENCY OF RESPONSES					
	Student (N=394)		Teachers (N=112)		Principals (N=8)	
	No	%	No	%	No	%
1. Sex						
Male	212	53.8	54	48.3	7	87.5
Female	182	46.5	58	51.7	1	12.5
Total	394	100	112	100	8	100
2. Age						
6 – 10	-	-				
11 – 15	341	86.6				
16 – 20	53	13.5				
21 – 25	-	-	9	7.8	1	12.5
26 – 30	-	-	19	16.7	-	-
31 – 35	-	-	36	32.4	3	37.5
> 36	-	-	48	43.1	4	50.0
Total	394	100.0	112	100.0	8	100.0

As can be seen in item 1 of Table 2, the proportion of male students to females was almost equal. Strictly speaking, however, males were slightly more than females. This is consistent with the national data.

By the same token, the sex distribution of the teachers was in proportion but the number of female teachers was a bit higher than that of the male teachers. The new education and training policy of Ethiopia promotes and enforces the implementation self-contained education in the lower

primary schools. Practice showed that female teachers are more suitable than the male teachers for self-contained instruction. Accordingly, more of them have been assigned in the said grade levels in most of the schools sampled. The finding of this research also reveals this reality.

However, the difference in the proportion of both sexes of the principals was significantly different. That is, the proportion of males is extremely higher than that of females. This indicates that females are still behind in assuming the administrative positions compared to male.

Concerning the age distribution of the students, the data showed that the majority (86.6 per cent) of students were in the age group of 11 to 15 years. This indicated that the majority of students in this group were in the conventional age limit for the specified grade level.

The majority (75.5 per cent) of teachers and 87.5 per cent of the principals were above the age of 31. This might indicate that both the majority of teachers and principals have a good experience that helps them to perform better.

3.2. ANALYSIS OF THE FINDINGS OF THE STUDY

3.2.1. Level of Repetition and Dropout in Primary Schools

Repetition and dropout rate are the indices by which internal efficiency of the education system is measured. Internal efficiency is commonly seen as a problem in the developing countries. Ethiopia, as one of the developing

countries, also faces the same problem of inefficiency. With this regard a data of repetition and dropout for the past five years were considered to show the magnitude of inefficiency at the national level.

TABLE 3
Level of repetition and dropout in Ethiopia

Rate of Repetition		Rate of Dropout	
Year	Per cent	Year	Per cent
1998/99	12.0	1997/98	12.1
1999/00	8.2	1998/99	19.0
2000/01	9.1	1999/00	17.8
2001/02	9.7	2000/01	16.2
2002/03	6.7	2001/02	17.1

Source: Educational Statistics Annual Abstract, 2003.

Table 3 shows the national average rate of repetition and dropout in primary schools. This is the average rate computed for all students attending in grades one to eight. But the national average of repetition in the lower primary schools, especially in grade 1, is relatively higher than the other grade levels, according to a report by the Ministry of Education (MOE 2002,8). The data shows that the rate of repetition in the primary schools is decreasing from year to year, from 12.0 per cent in 1998/99 to 6.7 per cent in 2002/03. The trend in the reduction of the rate of repetition may perhaps be the result of the implementation of automatic promotion in the lower primary grades.

As indicated above on Table 3, the rate of dropout is, however, higher as compared to the rate of repetition. At the same time dropout is relatively increasing. So, as the trend of dropping out shows, the internal efficiency of the schools is becoming low.

Similarly, the data from the Tigray Regional Education Bureau (2003:6) indicates that the pattern of repetition and dropout is similar to that of the national average. The regional average rate of repetition and dropout were 8.04 per cent and 25 per cent respectively for the 2001/2002 academic year. This figure shows that Tigray region has a higher rate of dropout than the national average, which is an indicator of a lower internal efficiency of the schools in the region.

3.2.3. Out - of - School Factors Affecting Internal Efficiency

Out - of – school factors are the factors that originate outside the school environment. Such factors are related with the pupil's home environment that may have a strong influence on student learning. The economic status, education level and expectation of parents, distance between home and school are some of the factors that are said to be out-of-school factors.

3.2.2.1. Student Attitude Towards Learning

The attitude of students towards learning has a significant impact on their achievement. Though, it is not the only factor, students' positive attitude and readiness towards learning can have a significant implication on

increasing student achievement and consequently reducing repetition and dropping out of school.

Table 4 contains a question that was forwarded to students in order to assess their attitude towards learning. The result obtained from the respondents was shown in Table 4.

TABLE 4
Students' Reason For Going To School

ITEM	N=394	
	No.	%
1. Why do you go to school?		
a. Because I like learning	364	92.4
b. I meet my friends	4	1.0
c. I like the school	15	3.8
d. My parents force me to go	11	2.8

As shown by item 1 of Table 4, the primary reason for students to go to school was their positive inclination towards learning. This may entail the fact that unless students are affected by other extrinsic factors, they would like to go to school and remain learning. This would certainly have a profound effect on the magnitude of student dropout and repetition rates.

To measure the attitude of students towards learning, some other indirect questions were forwarded to the students. Table 5 shows the response of the students.

TABLE 5
Students' Attitude Towards Learning

Items	STUDENT RESPONDENTS N=394				
	Always	Sometimes	Rarely	Never	Weighted Mean
	4	3	2	1	
1. How often do you study?	252	87	32	23	3.4
2. Do you finish homework on time?	303	73	10	8	3.7
3. How often do you participate in class?	258	106	20	10	3.6

As the response of the students, in Table 5, indicated most students had a positive attitude towards learning. The mean score for the responses related to allotting sufficient time for study, completing homework on time and active participation of the students in class are rated to be more than 3.0, which indicates a higher readiness on the side of students. Students who are interested in schooling are expected to be motivated enough to perform better. Better performance reduces the probability of repetition and dropout, consequently increasing the internal efficiency of education.

3.2.2.2. The Contribution of Preschool Education to Student Achievement

Preschool education is an education system that prepares students for primary schools. Preschool education helps children to have some academic as well as social skills that help them to perform well when they are admitted to primary schools. The expansion of pre-school educational

institutions is not, however, widely spread through out the region where this research is conducted. The very few available kindergartens are also concentrated in the urban areas. All children in the rural areas, except those who reside near to the towns, do not have an opportunity of attending Kindergartens. Table 6 shows the number of students who had educational experience before they were enrolled to elementary school and how much the preschool experience is important for their current achievement.

TABLE 6
Pre-school Education Experience of Primary School Students

ITEMS	STUDENTS N=394	
	No.	%
1. Did you have any educational experience before you entered formal school?		
Yes	165	41.9
No	229	58.1
Total	394	100.0
2. If your response for the above question is "Yes" what type of education have you had?		
Literacy program	98	59.4
Religious education	64	38.8
Kindergarten	3	1.8
Total	165	100.0
3. How much did the preschool educational experience helped you perform well in your current schooling?		
Very helpful	109	66.1
Helpful	34	20.6
Undecided	16	9.7
No relation at all	6	3.6
Total	165	100.0

As Table 6, item 1 shows, 58.1 per cent of the students had no exposure to any kind of educational experience before they were admitted to primary schools. The remaining 41.9 per cent had some sort of educational experience before they began attending grade 1. This might show that most of the students admitted to grade 1 did not have any knowledge that can assist them in overcoming problems that arise as a result of an exposure to the new environment of the schools.

As indicated in item 2 of Table 6, the number of students who came through regular Kindergarten system was very insignificant (1.8 per cent). The majority had an experience of literacy program (59.4 per cent) or religious education (38.8 per cent) like that of the church and kuranic schools. These figures indicated that some students had an opportunity to gain some educational experience. It would be difficult, however, to say whether such educational systems contributed much to the formal school system. Nevertheless, the majority (86.7 per cent) of the respondents who had preschool educational systems responded that the experience they had was very helpful to their academic performance. This might imply that preschool educational experiences had a positive contribution to the later achievement of students in primary schools. As mentioned above repetition rates are relatively higher in the lower grades where students did not have familiarity to the environment of educational institutions. The preschool education may, therefore, help in avoiding such problems and consequently reducing the rate of repetition and dropping out at early school years.

3.2.2.3. Family Economic Status

Schooling is one of the most expensive enterprises that require the expenditure of abundant resources. Among other things, parents cover the direct as well as indirect costs of schooling. Therefore, the probability of a child to go to school depends largely on parents' ability to cover these expenses. Financially incapable parents would either not send their children to school or force them to dropout altogether. To the worst, some needy families would like the labor of the children than sending them to school. Moreover, the economic status of parents would have impact on the level of nourishment of their children. These children who are from lower economic bracket group would be malnourished and consequently find it difficult to participate in school activities as their well to do mates. Table 7 shows the capability of parents to provide their children with food items and school materials.

TABLE 7
Economic Status of Parents: Students' Response

ITEMS	STUDENTS, N=394	
	No	%
1. Occupation of parents		
a. Farmers	282	71.6
b. Civil servants	51	12.9
c. Private business	21	5.3
d. Daily laborer	40	10.2
2. How often do you face shortage of school materials		
a. Always	22	5.6
b. Sometimes	194	49.2
c. Never	178	45.9
3. How many times do you eat in a day		
a. Once	14	3.6
b. Twice	194	49.2
c. Three times	178	45.9

This study was conducted in rural areas and the data presented in Table 7 shows that majority of the parents (71.6 per cent) were farmers. About ten per cent of the parents were also engaged in daily labor. It is generally understood that the average income of such parents, who were involved in farming and daily labor, would not be sufficient enough to support the family needs and to cover the cost of educating their children. The lower income of parents may force students to dropout for they cannot be able to get what the school requires from them.

Another serious problem that could affect student achievement was the unavailability of necessary school materials. The response of the students in item 2 of Table 7 indicated that, 5.6 per cent of the students reported that they had a problem of getting school materials they need. Forty nine point two per cent of the respondents reported that they sometimes had problems of getting required school materials. The abolition of school fee in the primary schools might have reduced what is required by a student to attend in school. But still the inability of parents to provide their children with the required school material had an impact on the achievement of the students. Students who are not supplied with necessary school materials they require for schooling would not be able to properly focus on their schoolwork. The academic achievement of students may be strongly affected by such reasons, which can lead to repetition and dropping out of school.

Item 3 of Table 7 shows the capability of parents in providing students with adequate amount of food. Students were requested to indicate how many times they eat in a day. Although, about half (45.9 per cent) were lucky enough to eat three times a day, most of the students (49.2 per cent) get food only twice a day. Although the percentage is very less, 3.6 percent of the students reported that they only get food once in a day.

The physical strength, class achievement and health conditions of students may be strongly affected by the amount of food intake. Students who are hungry are by no means expected to be attentive in class and to score better grades. Students in such a condition may be subject to the problems of repetition and dropout.

Similarly, students who do not get sufficient food may not be physically fit to travel longer distance to school. This combined with the health problems that can arise as a result of food shortage can increase the rate of absenteeism, which could finally lead to dropping out.

3.2.2.4. Parental Education Level

The education level of parents may have a significant impact on student learning. Educated parents have a higher level of participation in school affairs and are aware of the status of the performance of their children. Beyond this, educated parents have a better capacity to assist their children who face academic difficulties at home. Table 8 shows the educational status of parents.

TABLE 8
Educational Status of Parents: students' Response

	STUDENT RESPONDENTS N=394			
	<u>Father</u>		<u>Mother</u>	
	No.	%	No.	%
1. Educational background of parents				
a. Grade 1 – 6	33	8.4	17	4.3
b. > Grade 7	18	4.6	10	2.5
c. Religious Education	52	13.2	35	8.9
d. Illiterate	291	73.8	332	84.3
Total	394	100.0	394	100.0
2. How do your parents assist you in your academic career?				
a. Giving advice	340	49.9		
b. Purchasing school materials	248	36.4		
c. Arrange study time	51	7.5		
d. Tutoring at home	32	4.7		
e. Visiting me at school	10	1.5		
Total	681	100.0		

As indicated on Table 8, item 1, seventy three point eight per cent fathers and 84.3 per cent mothers of the students were illiterate. Because majority of the families were residents of the rural areas, they did not have the opportunity to get an educational access. As a result illiteracy was in a highest proportion. Thus, the overwhelming majority of the students could not enjoy the assistance of their parents in academic affairs.

As shown on item 2 of Table 8, the assistance of majority of the parents was only limited to advising their children. The parents did not help their

children in solving the academic difficulties the students faced at home for the problems may be beyond their ability to understand and solve them. It is also shown above in Table 8 that only 4.7 per cent of the students responded to have received tutoring. Only 1.5 per cent of the students also reported that their parents visited them at school to follow up their performance. While the rest of the parents did not know what is going on in the school and what their children were doing at school. Such a gap between the school and parents may have reduced the encouragement students were supposed to get from their parents. This in turn could affect the motivation of students and finally leading to poor academic performance of students. This is expected to have a direct impact on increasing the rate of repetition and dropping out.

3.2.2.5. School Location

Distance from home to school is another factor, which may aggravate the problems of school repetition and dropout. Long distance between home and school may perhaps discourage students from going to school and this may result in repeated absenteeism and tardiness. These two phenomena may have a significant effect on the learning conditions of students and as a result it may lead to repetition.

TABLE 9
School Location: Students' Response

ITEMS	STUDENT RESPONDENTS N=394	
	No.	%
1. How long does it take you to reach at your school?		
a. <30 minutes	170	43.1
b. 30min – 1hr.	111	28.2
c. 1hr. - 1:30 hrs	66	16.8
d. > 1:30 hrs.	32	8.1
e. No response	15	3.8
Total	394	100.0
2. How often do you arrive at school on time?		
a. Always	135	34.3
b. Sometimes	221	56.1
c. Rarely	22	5.6
d. Not at all	16	4.1
Total	394	100.0

As indicated on item 1 of Table 9, twenty four point nine per cent of the students traveled daily for more than an hour to arrive at their school. This situation may strongly impacted, particularly those children who were attending at lower grades. Students that reach at the school physically tired cannot learn effectively. On the other hand, due to the long distance between home and school, some students may not arrive to school on time.

Item 2 of Table 9 also showed that 56.1 per cent of the students responded that they were sometimes late to school. Coming late to school usually made them miss classes. This might have a significant impact on their class attendance. Repeated missing of classes affects the achievement of students and increases the probability for repetition. In addition to its impact on repetition, long distance between home and school discourages students from going to school and this can cause dropping out.

In order to identify the out – of - school factors that affect the rate of repetition in the rural schools, students were requested to select items that adversely affected their achievement from the following list in Table 10. The table shows the computed total average rating of the responses of students.

TABLE 10
Out - of – School Factors that Cause Student Repetition: Students' Responses

ITEM	STUDENTS N = 394					TOTAL AVERAGE RATING
	5	4	3	2	1	
1. Lack of study time	151	128	10	70	35	3.7
2. Absence from school	79	86	7	109	113	2.8
3. Lack of educational materials	85	97	15	96	101	2.9
4. Lack of parental encouragement	86	102	2	127	77	3.0
5. Distance from school	149	180	5	39	21	4.0
6. Student health problems	221	125	10	26	12	4.3

Strongly agree = 5
Agree = 4

Undecided = 3

Disagree = 2
Strongly disagree=1

As Table 10 shows, most of the students ($X=4.3$) agreed on student health problems as the major factors that contributed to student repetition in classes. The lower educational level of parents may have a relationship with the poor knowledge they have about personal and environmental hygiene. Health problems that arise as a result of poor hygiene could be the major reasons for the repeated illness of the students. Repeated illness increases absenteeism and as a result may be the cause for poor performance that may finally lead to class repetition.

The students, as discussed above, also mentioned the impact of distance on student learning, as a problem. The impact of distance traveled by students on their performance was already discussed above.

The shortage of time that could be used by the students to study their lessons at home was also indicated as the other factor ($X=3.7$) that influenced the rate of repetition. In the rural areas where child labor is highly required by parents, the students in such areas may not get sufficient time to work on their academic tasks. This might have had a strong impact on their performance in school. The more the family requires labor of students, the lesser would be the amount of time the students may have at their disposal. This, as a result, may increase the probability for lower class achievement.

As per the response of the students ($X = 3.0$), parental encouragement to students who attend schools was low in rural schools. This can be the result

of the lower academic status of parents and their limited awareness of the advantages of education. Illiterate parents may have a problem of understanding the advantages as well as the objectives of schools. Students who are not encouraged by their parents to attend school may lack motivation that impacts their achievement. Lower academic achievement may lead to grade repetition.

With regard to the impact of out - of - school factors on the rate of repetition, teachers and school principals were also requested to indicate their response as shown in Table 11. Their attitudes were measured in to five scales and results were analyzed and interpreted using mean scores.

TABLE 11
Out - of - School Factors that Cause Student Repetition: Teachers' and Principals Responses.

ITEMS	TEACHER, N =112					TOTAL AVERAG E RATING	PRINCIPALS, N = 8					TOTAL AVERAG E RATING
	SA	A	U	D	SD		SA	A	U	D	SD	
	5	4	3	2	1		5	4	3	2	1	
Poor academic performance	59	43	4	1	5	4.34	3	5	0	0	0	4.38
Lack of educational materials	35	46	0	17	14	3.63	1	2	0	5	0	2.88
Lack of suitable study place	40	36	0	25	11	3.62	3	4	0	0	1	4.00
Repeated absenteeism	47	30	1	16	18	3.64	0	4	0	3	1	2.88
Health problems	60	28	1	12	11	4.02	5	3	0	0	0	4.63
Lack follow up and encouragement from parents	16	54	3	20	19	3.25	2	6	0	0	0	4.25
Lack of study time	32	51	2	14	13	3.67	2	4	0	1	1	3.65
Distance from school	64	42	3	0	3	4.46	4	3	0	1	0	4.25

Strongly agree = 5

Undecided = 3

Disagree = 2

Agree = 4

Strongly disagree=1

The responses given by the two groups of respondents were almost similar to that of students. Respondents stated that distance between home and school, and health problems as the major reasons. Students also mentioned it above that distance as a serious problem that had affected the attendance of students. The longer the distance traveled by the students the higher is the probability for missing classes, having physical fatigue and as a result lack of concentration in class. Regular absenteeism in addition to its effect on repetition, it can also have a strong influence on the rate of dropout.

The rural areas are in general characterized by a scanty distribution of health facilities. As a result, infant illness is widely seen as a major phenomenon that prevails in the rural areas. As mentioned above, the respondents have indicated that health problem of students was also a major cause of repetition in the primary schools. Students that are infected by different types of diseases are forced to stay out - of - school for longer period of the academic calendar. This might have adversely affected the achievement of the students and causes a higher rate of repetition in the rural primary schools.

In addition to these, teacher and principal respondents indicated that poor academic performance of students was another major reason. This was the reason considered as the major cause for repetition both by the teachers and principals. Majority of the respondents have also indicated that lack of study time and lack of educational materials were also other important factors.

conducted is repeatedly affected by drought. The repeated food shortage that occurred in the region had forced, as can be anticipated from the response of the students, the people to leave their places to live in other areas where they can continue their livelihood. The resettlement of families by the help of government to other places where the climate is relatively better and fertile lands are available had also forced students to quit their schooling. Because the relocation would be to new areas where infrastructures were not available, the chance of the students to continue their education would be relatively low. This shows that the occurrence of drought and related consequences would have a serious impact on increasing the rate of drop out.

The second factor that was mentioned as a reason for dropping out - of - school was involvement of students in different employment activities outside home. In addition to the involvement of children in domestic activities, they were also employed outside their domestic engagements to satisfy their financial needs. The employment of students in income generating activities may have affected their attendance in school. As shown in Table 12, twenty two per cent of the student respondents reported that employment as an important factor that contributed to dropping out of school.

Health problem was also mentioned to be the other factor. As the distribution of health facilities is very limited in the rural areas, it is obvious that students may face health problems that force them to stay at home

for a long time. This can be a cause for dropping out of school. As shown earlier in this section of the study, a considerable number of students reported that they get food only once or twice a day. Shortage of food might be related to caused health problems related with malnutrition that contributed to dropping out of school.

Distance from school was also cited as one of the important factor that contributed to school dropout. About twelve per cent the respondents confirmed this. An official statistical document of the Tigray regional Education office (Appendix 4) also showed that distance from home to school was a major cause for dropping out in lower primary schools. Students attending in the lower grades faced a difficulty to travel hours long distance to learn.

As per the response of the students, although it was not as significant as the above-explained factors, drought was also mentioned by 4.6 per cent of the students as a reason for school drop out. As explained above drought could be a cause for malnutrition, health problem and even to migration. The diversified impact of drought on students may, therefore, cause dropping out.

Another significant cause that requires an attention is the problem of early marriage as a cause for dropping out. Compared with the other factors listed above, early marriage seemed to have a smaller impact on drop out. Although the magnitude of this problem was very limited, it was a

Table 13 presents the responses of both teachers and principals as to what out - of - school factors caused student dropout. The responses of these two groups were almost similar. Accordingly, teachers have ranked work outside home for money as the first important factor that caused dropping out while principals ranked this factor as the second important one. Distance between home and school was put second by teachers while it was the first important reason ranked by principals. Teachers have ranked health problems as the third major reason for dropping out while it was ranked fourth by principals. Drought, migration and famine are ranked fourth by teachers while it was ranked as the third important cause of drop out by principals.

Both teachers and principals have equally ranked work outside home, early marriage, and lack of encouragement from parents as the fifth, sixth and seventh reasons for dropping out respectively. The relation between the ranking of these factors by teachers and principals were statistically tested using spearman's rank order correlation. The calculated result ($\rho = 0.95$) indicated that there is a strong relationship between the responses of teachers and principals on out of school causes of dropout.

It was also shown above on Table 12, students had also ranked distance between home and school, work outside home, health problems and factors that were related with drought such as migration from one area to another and inability to attend class because of the lack of nutrition as the

most significant factors that might have contributed to higher rate of dropping out.

3.2.3. In-School Factors Affecting Internal Efficiency

In - school factors are those factors that cause problems to the students within the school compound. These problems range from the physical setup of the school buildings to the human inputs available in the school.

3.2.3.1. Factors Related to School Facility

The availability of favorable school environment like the presence of classrooms, libraries, laboratories and other similar school facilities may have a significant impact on the emotional readiness as well as academic performance of students. Schools that have a beautiful compound and availability of well furnished and equipped facilities attract the attention of students.

The following table shows the responses of students as to what their school environment looks like.

TABLE 14
Suitability of Schools: Students' Responses

Item	N=394	
	No.	%
1. How do you rate the suitability of your school for the teaching learning process		
Very suitable	95	24.1
Suitable	106	26.9
Average	116	29.5
Not suitable	77	19.5
Total	394	100
2. If your response (above) is "average" or "not suitable" what are your reasons?		
Large class size	135	40.7
No enough desks	86	25.9
Insufficient school materials	76	22.9
Unsuitable school timetable	35	10.5
Total	332	100

From Table 14, it can be observed that the schools were not convenient for student learning. As the response of the students indicated, about 49.0 per cent and 19.5 per cent responded that the schools were not convenient for them. The respondents also mentioned the reasons as to why the schools were not suitable. Accordingly, as indicated on item 2 of Table 14, about forty per cent of the respondents answered that large class size was the major reason that made learning difficult in the schools. Large class size might have a serious problem especially in areas where

the weather is dominantly humid. It is usually said that large class size is the reason for the lack of individual assistance teachers give to students. The larger the number of students in a class, the more is the time required by teachers to help each student. This may enable teachers to give individual assistance to their students.

In addition to the physical discomfort that arises as a result of the presence of bigger number of students, big class size creates a problem for teachers in managing their class.

Another noteworthy reason cited by 25.9 per cent of the respondents was insufficient number of desks and chairs compared to the number of students assigned in one class. In rural schools, it is not only that the desks and chairs are insufficient but they are not also in a position to keep the comfort of students. Students who are not happy about their school environment may not have an interest to attentively learn in classes.

In addition to the convenience of the classrooms and generally the school environment, the presence of facilities like laboratories, libraries, workshops and pedagogical centers, have a direct input to the academic activities of students. With regard to the availability of necessary school facilities in their schools, principals were asked to rate the status of their respective schools. The following table portrays their responses.

Table 15
School Facility and Material Supply: Principals' Responses

ITEM	PRINCIPALS N=8									
	Very Sufficient		Sufficient		Average		Insufficient		Not at All	
	No	%	No	%	No	%	No	%	No	%
School buildings	-	-	-	-	6	75.5	2	25		
Library	-	-	-	-	-	-	2	25	6	75
Science kit	-	-	1	12.5	1	12.5	4	50	2	25
Pedagogical center	-	-	-	-	2	25	3	37.5	3	37.5
Laboratory	-	-	-	-	-	-	1	12.5	7	87.5

As shown in Table 15, the availability of school facilities like convenient school buildings, library and laboratories is very limited. Seventy five per cent of the respondents had expressed that there were no libraries at all in their schools. As explained by 87.5 per cent of the respondents in Table15, the other significant problem indicated was that there were no laboratories at all in their respective schools. This could be an indicator of the poor provision of educational service in the rural areas. Students in the higher primary schools were expected to do some experiments in their science lessons. But if laboratories were unavailable it would not be possible to conduct the teaching learning process as expected. Even the distribution of science kits, which can assist in doing practical activities at the lower grades, was still very low.

The absence of laboratories in schools might have limited the opportunity to exercise practical applications that should be conducted by students to make the theories taught in classes more concrete. Practical exercises enhance student learning because students are involved in activities that increase the understanding of concepts that will have a significant contribution to greater class achievement. The absence of laboratories might have, therefore, affected learning and contributes to class repetition.

Libraries and pedagogical centers have an important contribution to student learning. The availability of references and other supplementary reading materials widens the knowledge base of students. The more students read books the greater may be their capacity to have a rich general knowledge, which assists them in their achievement. But as seen in the Table 15 above, it can be said that almost all the schools did not have a library. This might have limited the ability of the students to widen further the scope of their knowledge of what they were thought in class. The absence of libraries had made students to remain dependent only on what is given to them in class. This limited options of students could have an impact on their achievement.

3.2.3.2. Teacher Qualities

Teacher training is mostly cited as an important element that contributes to the success of students in their learning. With this regard, an attempt was made to assess the level of training of the teachers in elementary

schools. But most schools had teachers who were either not trained to be teachers or with a very limited training.

TABLE 16
Respondents by academic qualification and years of service

ITEMS	TEACHERS (N=112)		PRINCIPALS (N=8)	
	No	%	No	%
1. Academic qualification				
a. Below 12	11	9.8	-	-
b. 12 complete	13	11.6	-	-
c. TTI	52	46.5	4	50.0
d. 12 + 1	22	19.6	-	-
c. 12 + 2	<u>14</u>	<u>12.5</u>	<u>4</u>	<u>50.0</u>
Total	112	100.0	8	100.0
b. Years of Service				
< 5 years	11	9.8	2	25.0
6 – 10 years	13	11.8	4	50.0
11 – 15 Years	42	37.3	1	12.5
> 16 years	<u>46</u>	<u>41.2</u>	<u>1</u>	<u>12.5</u>
Total	112	100.0	8	100.0

As noted in Table 16, only 12.5 per cent of the teachers had a college diploma. While the majority (46.5 per cent) teachers were TTI graduates. The number of teachers with diploma was very low. In a situation where there is a shortage of qualified teachers TTI teachers may be assigned to teach in the upper primary grade levels, which usually required a higher-level of training. The study also showed that 11.6 per cent of the teachers had only completed grade 12. About nine per cent teachers had not even completed grade 12. This may make the teachers less productive

TABLE 17
Students' Academic Performance as Perceived by Their Teachers

ITEMS	TEACHERS, N=112	
	No	%
1. How do you perceive the performance of your students?		
a. Excellent	3	3.0
b. Very good	23	20.8
c. Average	68	60.4
d. Poor	14	12.9
e. Very poor	3	3.0
Total	112	100.0
2. How much is your expectation about the future improvement of students.		
a. Very high	5	4.5
b. High	35	31.3
c. Undecided	1	0.9
d. Less	67	59.7
e. Very less	4	3.6
Total	112	100.0

Table 17 shows the perception of teachers about their students' academic performance. As indicated on item 1 of Table 17, most teachers (60.4 per cent) perceived that their students were average performers. About twelve point nine per cent and 3.0 per cent of the teachers also indicated that their students were "poor" and "very poor" respectively in their academic performance.

Item 2 of the same table showed teachers expectation with regard to the possibility of future improvement in the performance of the students. As

the figures indicated, 59.7 per cent of teachers responded that they did have any expectation that the students would improve their academic performance in the future. The teachers had a lasting impression of what they had assessed at the beginning of the year. It seems that once most teachers believed that a student performs poorly, they feel that the student will remain as a slow learner forever. This may have a very serious effect on the achievement of students. As shown above in Table 17, less than half of the respondents (31.3 per cent) had a positive attitude towards improvement of their students. If the expectation of teachers is very low, it is unlikely that teachers would try to help students work better. This would probably demoralize students and would ultimately make the students to repeat classes or totally dropout of school.

3.2.3.3. School Timetables

School timetables are scheduled by the Ministry of Education uniformly to function both in urban as well as rural schools all over the country. However, this schedule sometimes goes against the interest of particularly rural households, with regards to their active agricultural periods. The following table shows the attitude of students towards the annual school timetable.

Table 18
Convenience of school timetable: students' responses

ITEM	N=394										Total Average Rating
	Very suitable		Suitable		Average		Less suitable		Not suitable		
	No	%	No	%	No	%	No	%	No	%	
How convenient is the annual and daily timetable of the school to you?	70	17.8	89	22.6	98	24.9	105	26.6	32	8.1	3.1

The students in rural schools are engaged in different types of activities to assist their parents. The harvest time is a time when the rural households critically require labor. During this time, students are forced to absent themselves from schools and are forced to work with their parents.

As Table 18 shows, a considerable number of the respondents (26.6 per cent) reported that the school timetable was less convenient for them. The mean score of the responses ($\bar{x}=3.1$) also showed that almost half of the respondents had a problem with the schedule or the annual as well as daily school timetables. The above figure calls for an attention that if a school timetable is not convenient for students, there is a higher probability for students to stay out of school when they are faced with pressing family engagements. Repeated absenteeism has a direct impact on their learning and which finally could lead to class repetition or to totally dropout of school.

As mentioned above at different times, there are many in - school factors that contribute to repetition of students in schools. Teachers and principals were asked to rank those factors that lead students to repeat classes, from the most important causes to the least important ones. The following table shows the results of the respondents.

Table 19
In - school factors causing student repetition: Responses of principals and Teachers

ITEM	TEACHER N=112			PRINCIPALS N=8			D	D ²
	No.	%	Rank	No.	%	Rank		
Unsuitable school buildings	55	39.3	1	1	6.7	5	-4	16
Lack of reference materials	44	31.4	2	3	0.0	7	-5	25
Difficult examinations	3	2.14	6	0	0.0	6	0	0
Shortage of trained teachers	25	17.9	3	5	33.3	1	2	4
Limited teaching experience	5	3.57	5	2	13.3	4	1	1
Lack of encouragement by teachers	7	5	4	4	26.7	2	2	4
Lack of interest of teachers	1	0.7	7	0	20.0	3	4	16
	140	100		15	100.0		0	66

• Rank order correlation (ρ) = - 0.2

*- Respondents have chosen more than one item.

Table 19 shows the responses of teachers and principals in order of their magnitude in affecting the rate of repetition in the rural primary schools. Accordingly, teachers ranked unsuitable school buildings as the first cause for student repetition while the principals ranked the same item 5th. Similarly, teachers ranked lack of reference materials second important

factor while it was ranked seventh by school principals. Shortage of trained teachers is ranked third by the teachers while principals ranked it as a first important factor that contributes to higher rate of repetition. The other item that was ranked fourth by the teachers was lack of encouragement of students by teachers. This same item was also ranked as the second important factor by principals. Teachers cited limited teaching experience as the fifth major cause for class repetition while this was ranked fourth by the principals. Difficult examinations and lack of the interest of teachers were ranked as the sixth and seventh factors respectively. These similar items were ranked sixth and third respectively by principals.

As the response of both respondents shows, teachers mentioned factors that were related with school facility as the major reasons for repetition. The responses of the principals, on the other hand, indicated almost opposite to the responses of the teachers. The principals had shown that teacher characteristics like lack of teacher training; limited teaching experience and lack of encouragement by teachers were the major factors for the repetition of students.

Finally, the relation between the ranking of these factors by teachers and principals were statistically tested using Spearman rank order correlation. According to this test, the result ($p = -0.2$) shows that the responses of the two respondents were negatively correlated.

Table 20

In - school Factors that Cause Student Repetition: Students' Responses

ITEMS			
	No.	%	Rank
1. Unsuitable school buildings	102	17.3	3
2. Lack of reference materials	44	7.4	5
3. Difficult examinations	41	6.9	6
4. Unavailability of laboratories and other School facilities.	101	17.1	4
5. Lack of encouragement by teachers	180	30.5	1
6. Lack of interest of teachers in teaching	123	20.8	2
	591	100	

* -Respondents had chosen more than times

Table 20 shows the responses of students to the causes of grade repetition. As the ranked response of students shows lack of encouragement by teachers was the first important cause for class repetition. Lack of teaching interest of teachers, which accounted for 30.5 per cent of the responses, was ranked as a second factor that caused repetition. Unsuitable school building was also ranked as the third important factor that contributed to grade repetition. The responses of the students were to some extent similar to the responses of the principals discussed above. Both the teachers and principals had mentioned teacher related factors as the major causes for repetition.

Teachers and principals were also asked to identify the major in - school factors that contributed to dropping out of school. The following table shows the results of the responses given by teachers and principals.

TABLE 21
In - school Factors that Cause Student Drop out: Teachers' and Principals' Responses

ITEMS	T/P*	Teachers N =112, Principals N= 8					Weighted Mean
		5	4	3	2	1	
1. Discipline problem	T	18	10	0	33	51	2.2
	P	0	1	0	1	6	
2. Unsuitable school environment	T	10	20	1	36	45	2.2
	P	0	3	0	1	4	
3. Poor academic performance	T	16	11	3	72	10	2.6
	P	0	2	0	4	2	
4. Shortage of materials in the school	T	32	22	1	27	30	3.0
	P	2	4	0	1	1	
5. Inability to afford educational expenses	T	12	22	4	58	16	2.6
	P	0	1	0	5	2	

* T = Teachers P = Principals

Strongly agree = 5

Agree = 4

Undecided = 3

Disagree = 2

Strongly disagree=1

As the above table shows, the response both from teachers and principals indicated that in-school factors like disciplinary problems, poor academic performance, inability to afford educational expense did not have strong relationship with student dropping out of school. The avoidance of school fee and free distribution of textbooks and other materials had probably minimized the problems related with financial capabilities of the students. As can be seen from the response of both teachers and principals, in - school factors had a lesser contribution to student dropping out.

Chapter Four

4. Summary, Conclusion and Recommendation

This part of the paper concentrates on presenting the summary, conclusion and recommendations made as a result of the study.

4.1. Summary of the Major Findings

The purpose of this study is to investigate the problem of internal efficiency in the rural primary schools of Tigray region. In view of this objective, it has tried to identify the major factors that affected the internal efficiency of the rural schools. Attempt has been made to measure the degree of influence of these factors on the internal efficiency of rural schools.

The study was made using descriptive survey approach. The 127 rural complete primary schools in the region were stratified in to four zones and a quota of two schools was given to each zone, selecting a total of 8 schools. To select the particular schools to be included in the sample, random sampling technique was employed. The subjects of the study were students, teachers and school principals. 400 students and 120 teachers were randomly selected. All the principals of the sample schools were also included as samples for the study.

Data were gathered from these respondents using questionnaire. Three sets of questionnaires were prepared in Amharic and Tigrigna and distributed after a relevant and related literature was reviewed.

Descriptive statistics was then used to analyze the data. That is, after the collected data were tallied and tabulated, frequency distribution, percentages mean scores and rank order correlations were used to analyze the data. The detailed analysis of the collected data thus revealed the following results. The major findings of the study are:

1. Most students (58.1 per cent) attending in rural primary schools did not have an opportunity to attend preschool education. The students who had a preschool educational experience have got an advantage when entering the primary school.
2. Students had a good attitude towards learning. The majority of students have responded that they had a higher desire or readiness to learn. Student attitude is not observed to be a factor that contributes to repetition and dropping out of school.
3. Parents of students were economically incapable to cover the necessities of their children. Parents were not able to sufficiently supply sufficient school materials and very important is that parents were not in a position to properly feed their children.
4. Most of the parents of students were illiterates. The students did not get a support from parents related to their academic difficulties they faced at home.
5. All the respondents indicated that longer distance between home and school had an adverse impact on the rate of repetition and dropping of school.

6. Health problems of students were other prominent factors that caused a higher rate of repetition and dropping out in the rural schools.
7. The repeated drought and famine occurring in the region had affected the food supply of students and had increased the rate of migration and relocation of residences that significantly contributed to dropping out.
8. Employment outside home is another significant factor, which increased the rate of dropping out.
9. Poor academic performance of students did not have a significant impact on school dropping out.
10. Most of the respondents confirmed that primary schools did not have classrooms that are convenient for learning, of which bigger class size is a major problem.
11. It was found that teachers in the rural primary schools lack required qualifications to the level they are currently working. The majority are TTI graduates and a significant number of teachers have not even completed grade 12.
12. Teachers' perception about the achievement of their students was very low. Majority of the teachers had already convinced themselves that the students will not improve in the future.
13. Almost all the primary schools did not have the necessary facilities and materials those enhance the learning capacity of students. School buildings, library, science kit, pedagogical center and laboratory were not sufficiently available in the schools.

14. School timetables were not suitable for majority of the students in the rural schools.

4.2. Conclusions

In light of the summary of the major findings the following conclusion has been drawn.

1. The readiness of students towards learning is higher in almost all the students. This is an opportunity that should be exploited to enhance the rate of enrollment in the rural schools.
2. The inability of parents to provide their children with the necessary instructional materials and supplies that help them to effectively learn in schools is still a problem. The limited income of parents, for example, was also a major cause of malnutrition. This might have significantly impacted on the effectiveness of students in the school, which in turn could have an effect on the internal efficiency.
3. Most of the rural parents are not literate. This situation had affected the achievement of students because the parents are not able to help their children when they require an academic assistance during out - of – school hours.
4. Distance between home and school was a major cause for both repetition and dropping out of school. Students traveling a long distance to arrive at school are not supposed to perform actively.

This had a significant impact on the rate of repetition. The repetition by itself could be a reason for dropping out. The longer the distance between home and school the higher would be the probability for students to be reluctant to go to school. This might have reduced the internal efficiency of the schools.

5. Regarding teachers, the research subjects had different views regarding the problems related to teachers.

a. The qualification and academic level of the majority of teachers was very limited to satisfy the needs of the teaching learning process in the primary schools. This might have, in many ways, contributed to the rate of class repetition and student dropping out.

b. The expectation of teachers about the performance of their students was negatively affecting student achievement. Persistent belief about the lesser probability for improvement on the side of students might have limited the building of a strong relationship among teachers and students. This could have reduced the readiness of teachers to equally assist all students in their academic performance, which in turn contributes to repetition and dropout.

6. The timetables of rural schools were not convenient for the majority of rural students. As it is usual for rural students to be involved in

domestic work, their engagement in inside and out of home activities had conflicted with the fixed school timetables.

7. The region was repeatedly stricken by drought. This had impacted the rate of repetition and dropout in two ways.

a. It has resulted in food shortages, which contributed to higher probability for under nourishment of students. This might have caused to the lack of concentration of students on their schoolwork and as a result minimized the achievement of students.

b. The changes in the location of residences, as a result of the occurrence of the drought had forced students to dropout of school and live in areas where they can get food supply.

4.3. Recommendations

Based on the major findings and conclusions drawn with respect to the factors affecting the internal efficiency of rural primary schools in Tigray region, the following recommendations are suggested.

1. The findings of the study have indicated that the current level of academic as well as professional qualification of many teachers is not satisfactory compared to the requirements of the primary schools. To increase the productivity of the teachers and as a result to reduce the rate of repetition and drop outs, it is of paramount importance to prepare updating programs that assist teachers in

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Addis Ababa University
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Questionnaire to be filled by Students

Name of School _____

Part I. Personal Details

1. Sex Male ☐ Female ☐

2. Age 6 – 10 ☐

 11 – 15 ☐

 16 – 20 ☐

 > 20 ☐

3. Marital Status

 Single ☐

 Married ☐

4. Grade Level _____

Part II.

5. Did you have any educational experience before you entered formal school?

 Yes

 No

6. If your response for the above question is "Yes" what type of education have you had?

 Literacy program

 Religious education

 Kindergarten

7. How much did the preschool educational experience helped you perform well in your current schooling?

 Very important

 Important

 Undecided

 No relation at all

	Always	Sometimes	Rarely	Never
8. How often do you study?				
9. Do you finish homework on time?				
10. How often do you participate in class?				

11. Why do you go to school?

- a. Because I like learning
- b. I meet my friends
- c. I like the school
- d. My parents force me to go

12. Do your parents live together?

Yes _____ No _____

13. If they are not living together, with whom do you live?

- a. with my father
- b. with my mother
- c. with other relatives

13. What is the educational background of parents

Father

Mother

- | | | | |
|------------------------|--------------------------|------------------------|--------------------------|
| a. Grade 1 – 6 | ☐ | a. Grade 1 – 6 | ☐ |
| b. > Grade 7 | ☐ | b. > Grade 7 | ☐ |
| c. Religious Education | ☐ | c. Religious Education | ☐ |
| d. Illiterate | ☐ | d. Illiterate | ☐ |

14. How do your parents assist you in your academic career?

- a. Giving advice
- b. Purchasing school materials
- c. Arrange study time
- d. Tutoring at home

e. Visiting me at school

15. What is the occupation of your parents?

a. Farmers

b. Civil servants

c. Private business

d. Daily laborer

16. How often do you face shortage of school materials?

a. Always

b. Sometimes

c. Never

17. How many times do you eat in a day?

a. Once

b. Twice

c. Three times

18. How long does it take you to reach at your school?

a. <30 minutes

b. 30min – 1hr.

c. 1hr. - 1:30 hrs

d. > 1:30 hrs.

e. No response

19. How often do you arrive at school on time?

a. Always

b. Sometimes

c. Rarely

d. Not at all

20. How do you rate the suitability of your school for the teaching learning process?

Very suitable

Suitable

Average

Not suitable

21. If your response (above) is "average" or "not suitable" what are your reasons?

Large class size

No enough desks

Insufficient school materials

Unsuitable school timetable

22. How convenient is the annual and daily timetable of the school to you?

a. very suitable

b. suitable

c. average

d. less suitable

e. not suitable

23. Following is a list of out school factors that are expected to have an influence on student dropout. Put them in rank order according to their significance from the most important to the least important.

Item	Rank
1. Migration and resettlement	
2. Work out side home	
3. Health problems	
4. Distance from home to school	
5. Drought	
6. Early marriage	
7. Work inside home	
8. Shortage of school materials	
9. Birth related factors	
10. Poor academic performance	

24. Following is a list of in - school factors that are expected to have an influence on student repetition. Put them in rank order according to their significance from the most important to the least important.

APPENDIX 2

Addis Ababa University
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Department of educational Planning & Management

Questionnaire to be filled by principals.

Part 1. Personal Details

1. Age a. 20 – 25
 b. 26 – 30
 c. 30 – 35
 d. > 30

2. Sex Male ☐ Female ☐

3. Educational Status

- a. BA/BSc. ☐
b. 12 + 2 ☐
c. 12 + 1 ☐
d. TTI ☐
e. 12 Complete ☐
f. < Grade 12 ☐

4. Field of Study:

Major _____ Minor _____

5. Years of service as a principal

- a. Less than five years ☐
b. 6 – 10 years ☐
c. 11 – 15 years ☐
d. > 16 years ☐

Part 2.

6. How do you rate the availability of the following facilities in your school?

	Very Sufficient	Sufficient	Average	Less	Not at All
School buildings					
Library					
Science kit					
Pedagogical center					
Laboratory					

7. Following is a list of out of school factors that are expected to have an influence on student repetition. Put an 'X' mark on your choice in the box below as per the scale of their significance.

Items	Strongly Agree	Agree	Un-decided	Disagree	Strongly disagree
Poor academic performance					
Lack of educational materials					
Lack of suitable study place					
Repeated absenteeism					
Health problems					
Lack follow up and encouragement from parents					
Lack of study time					
Distance from school					

8. Following is a list of in school factors that are expected to have an influence on student repetition. Put them in rank order according to their significance from the most important to the least important.

Item	Rank
1. Unsuitable school buildings	
2. Lack of reference materials	
3. Difficult examinations	
4. Shortage of trained teachers	
5. Limited teaching experience	
6. Lack of encouragement by teachers	
7. Lack of interest of teachers	

9. Following is a list of in school factors that are expected to have an influence on student dropout. Put them in rank order according to their significance from the most important to the least important.

ITEMS	RANK
Poor academic performance	
Distance from school	
Health problems	
Early marriage	
Work inside home	
Work outside home for money	
Drought, migration & famine	
Lack of encouragement from parents	

10. Following is a list of in- school factors that are expected to have an influence on student dropout. Put an 'X' mark on your choice in the box below as per the scale of their significance.

	Strongly Agree	Agree	Un- Decided	Disagree	Strongly Disagree
1. Discipline problem					
2. Unsuitable school environment					
3. Poor academic performance					
4. Shortage of materials in the school					
5. Inability to afford educational expenses					

Addis Ababa University
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Department of educational Planning & Management

Questionnaire to be filled by Teachers.

Part 1. Personal Details

1. Age
 - a. 20 – 25
 - e. 26 – 30
 - f. 30 – 35
 - g. > 30
2. Sex Male ☐ Female ☐
3. Educational Status
 - g. BA/BSc. ☐
 - h. 12 + 2 ☐
 - i. 12 + 1 ☐
 - j. TTI ☐
 - k. 12 Complete ☐
 - l. < Grade 12 ☐
4. Years of service as a teacher
 - a. Less than five years ☐
 - b. 6 – 10 years ☐
 - c. 11 – 15 years ☐
 - d. > 16 years ☐

Part 2

5. How do you rate your attitude towards your profession?
 - a. Very strong
 - b. Strong
 - c. Undecided
 - d. Weak
 - e. Very weak
6. How many periods do you teach in a week?
 - a. < 10 periods
 - b. 10 – 15 periods

- c. 16 – 20 periods
- d. 21 – 25 periods
- e. > 26 periods

7. How do you perceive the performance of your students?

- a. Excellent
- b. Very good
- c. Average
- d. Poor
- e. Very poor

8. How much is your expectation about the future improvement of students?

- a. Very high
- b. High
- c. Undecided
- d. Less
- f. Very less

9. Following is a list of out of school factors that are expected to have an influence on student repetition. Put an 'X' mark on your choice in the box below as per the scale of their significance.

Items	Strongly Agree	Agree	Un-decided	Disagree	Strongly disagree
Poor academic performance					
Lack of educational materials					
Lack of suitable study place					
Repeated absenteeism					
Health problems					
Lack follow up and encouragement from parents					
Lack of study time					
Distance from school					

10. Following is a list of in school factors that are expected to have an influence on student repetition. Put them in rank order according to their significance from the most important to the least important.

Item	Rank
1. Unsuitable school buildings	
2. Lack of reference materials	
3. Difficult examinations	
4. Shortage of trained teachers	
5. Limited teaching experience	
6. Lack of encouragement by teachers	
7. Lack of interest of teachers	

11. Following is a list of in school factors that are expected to have an influence on student dropout. Put them in rank order according to their significance from the most important to the least important.

ITEMS	RANK
Poor academic performance	
Distance from school	
Health problems	
Early marriage	
Work inside home	
Work outside home for money	
Drought, migration & famine	
Lack of encouragement from parents	

12. Following is a list of in- school factors that are expected to have an influence on student dropout. Put an 'X' mark on your choice in the box below as per the scale of their significance.

	Strongly Agree	Agree	Un- Decided	Disagree	Strongly Disagree
1. Discipline problem					
2. Unsuitable school environment					
3. Poor academic performance					
4. Shortage of materials in the school					
5. Inability to afford educational expenses					

Appendix 4

Reasons for Dropping out of school

No.	Reasons	Grade 1 - 4			Grade 5 - 8			Grand Total
		Male	Female	Total	Male	Female	Total	
1	Health Problems	1414	2003	3417	896	532	1428	4845
2	Employment	2430	1905	4335	1421	584	1885	6220
3	Marriage	216	543	759	131	428	559	1318
4	Discipline problems	48	10	58	100	18	118	176
5	Distance from school	1575	1500	3075	424	263	687	3762
6	Drought	433	379	812	386	221	607	1419
8	Migration & Resettlement	2233	5125	7358	958	547	1505	8863
9	Lack of instructional materials	116	126	242	79	103	182	424
10	Low academic achievement	0	0	0	0	0	0	0
11	Unknown cases	2753	2235	4988	20058	283	20341	25329

Source: Tigray Regional education Bureau, May, 2003

Appendix 5

List of Sample Schools

S/N	Name of School	No. of Students	No. of Teachers
1	Maedo Korem complete primary school	683	20
2	Hiwane complete primary school	703	23
3	Debri complete primary school	639	17
4	Aynalem complete primary school	652	19
5	Maymekden complete primary school	712	20
6	Bizet complete primary school	682	19
7	Mariam Dehan complete primary school	621	19
8	Adi Daero complete primary school	688	20

This thesis has been submitted for examination with my approval
as university advisor.

Name: Melaku Yimam

Signature: 

Date: May 31, 2004

DECLARATION

I, the undersigned, declare that this thesis is my original work and all sources of materials used for the thesis have been duly acknowledged.

Lisanu Ashebir



