Addis Ababa University

College of Education and Behavioral Studies

Department of Educational Planning and Management

Implementation of the 70:30 Students Placement Policy in Government Preparatory Schools of Addis Ababa City

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Implementation of the 70:30 Students Placement Policy in Government Preparatory Schools of Addis Ababa

BY

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Acronyms and Abbreviations

AACA: Addis Ababa City Administration

AAU: Addis Ababa University

AKSB: Addis Ketma Sub-City

ASC: Arada Sub-City

FDRE, ETP: Federal Democratic Republic Government of Ethiopia Education and Training Policy

GSC: Gullele Sub-City

ICT: Information and Communication Technology

LSC: Lideta Sub-City

MoE: Ministry of Education

SCEO: Sub-City Education Office

SL: School Laboratory

SLS: School Library Size

SPC: School Pedagogy Center

YSC: Yeka Sub-City

Abstract

*The purpose of this study was to explore factors influencing the Current implementation of the 70:30 students placement policy in some selected Government Preparatory Schools of Addis Ababa City. To this end, both quantitative and qualitative research approaches were used for data collection and analysis. A total of **931** of the study were selected using both purposive and simple random sampling techniques. The questionnaire was used to collect data from teachers and students. Interviews were held with school principals, guidance and counselors, librarians and lab-technicians to complement the information obtained through questionnaire. At the same time observation was also integrated to gather information more about inputs and level of organizations regarding school laboratory, library, and ICT center and class rooms. In addition to this document analysis was made to validate and triangulate information from different sources regarding range of implementation of the 70:30 students placement Policy. Descriptive statistics were used to analyze quantitative data. The overall findings of this study reported that, some of the basic factors that challenge the implementation of the 70:30 students' placement policy in some selected Government Preparatory Schools in Addis Ababa City Administration were highly generated from the weakness of preparatory schools level of organization to support and strength the program with more of practical works of students. through additional incentives of teachers, result and quality of the 70:30 students' streaming Policy was highly challenged by the factors related to students' interest and commitments to study hard and competent for their better academic performance in science subjects and there is also problems on preparatory schools principal in terms of paying much of their time through supporting and making conducive teaching learning environments instead of spending their time for routine activities. Finally, based on the findings and conclusions recommendations were made to address the problem under study.*

Chapter One

Introduction

This chapter is concerned with the introductory aspect of the study. It states the objectives, the problem and its approaches. It include the background of the study, the statement of the problem, the significance of the study, the scope of the study, limitation of the study, the definition of key terms and organization of the study.

1.1 Background of the study

According to White (2007:122) Student streaming refers to the grouping of students by interest and ability. Formal education is a teaching and learning process conducted in institutionally organized medium for learning has the responsibility for educating large number people that come from greater diversity of background and wider range of interests and abilities in different disciplines. They train people for the world of tomorrow so that today's students will be adult and able to play active role in the society.

Schools are expected to show effort to match the learners interests and ability with the country's future human resource requirement and aware the young learners to project themselves in the world of work of the future. Cheng (2001) also pointed out that students' streams choice affects both the individual student's own future and the supply of educated and trained labor force required for the country.

Education supply must precede human resource and other necessary preconditions installation demand. This means we should plan human resource and other facilities supply on the basis of demand. Man power planning is however, is more complex than students' enrollment in education system of a country. The issue is broader than the employment opportunity it also needs creating and developing interest on students in the fields that have high employment opportunities in order students to join those fields willingly. Educational investment in the fields that have less employment opportunities internally or abroad would be wastage of resource and consequence problems.

The system of education for all round development of human personality to serve the spiritual, moral, social, cultural development of the individual & an essential progress of the community as well as to inculcated deep respect to human rights & fundamental freedoms (Hopkins, 1980).An educational system is said to be efficient if the quality of and /or quality of education are at a maximum from the use of a given volume resource imputes, MOE (2005). Hopkins (1980), Simons, (1980) & Lewin (2005) not that the complex nature of education in one way or the other results educational wastage which is caused by dropouts, push outs &repetitions. This further affects the quality of education of the system.

The education system requires appropriate policies, strategies, curriculum and pedagogy that guide the education system in the direction of achieving its goals and objectives. It also requires substantial amount of resource that demands the commitment of the governments to invest some of their national income to fulfill the necessary inputs. Besides, there seem challenges of the new millennium such as; rapid globalization, tremendous effects of information technology, the international transformation towards knowledge drive economy etc that have driven numerous educational change. All these factors demand, the education system to be organized with clear relevance that link with the current development of the country(Temechegn,2000).

Three attempts were made to reform the educational system since the establishment of modern school in 1980 in Ethiopia by the last three Ethiopian governments (Temechegn,2000) These reforms were the education sector review (ESR)launched by the imperial regime in 1971,the evaluative research in the general education system of Ethiopia (ERGESE) which was undertaken in 1980 by the provisional military administrative council (PMAC) commonly known as Derge and the 1994 education and training police (ETP) of the transitional government of Ethiopia.

The time of formulating ETP, the then education system was suffered from multiple problems of relevance, quality accessibility and equity TGE, 1994 .The ETP sought to remedy these chronic problems of education by introducing education reforms. Following ETP The structure of education in Ethiopia which was 6:2:4 (6 years of first cycle primary education, 2 years of second cycle primary education, and 4 years of secondary education) had been replaced by 8:4(8 years of primary education and 4 years of secondary education) structures. The second cycle of

secondary education would enable students to choose subjects or area of training which would prepare them adequately for higher education and for the world of work (ETP, 1994,)

Form the ETP policy document grade 11 preparatory students are expected to choose their field of study as either natural science or social science. Science subjects such as physics, chemistry, and biology are given starting from grade seven and continue to general secondary education (grade9 and 10) as compulsory subjects for all students. This early experience of science education is believed to help students in developing interest to select it as their future career and ultimately helps to promote scientific thinking and technology transfer in the society. A recent study by Samson Fekadu (2010) has in fact indicated early experience with science is likely to have an effect on the likely hood that students pursue science in their career.

In any stage of development, a given society requires some type of knowledge and skill related to its stage of development. Individuals at schools are also expected to be citizens of their country with bounded type of knowledge and skills that meet the need of that society (Chenge, 2001) pure science is a source of new technology and competitiveness in the global world, (Hamel, 2011,) stated that" in spite of the difficulty to precise measurement, there seems to be a general agreement that the real difference between developed and developing countries mainly lies in their technological capacity". The technological capacity can be obtained through giving priority and promoting science/ engineering education.

The five years economic development and transformation plan of Ethiopia (2010) states that "the vision of the country is to detach the country from poverty and achieving the long term vision of transforming Ethiopia in to middle income country in 2025." The demands among other things, conscious application of science technology and innovation as a measure instruments to create wealth. It requires on the other hand, strengthening the human resource development to be competent through training innovative people with special attention to engineering, technology and natural science. Accordingly, Ethiopia has adjusted the student's enrollment ratios in higher education institution through introducing high quality science and Mathematics curriculum at primary and secondary schools and recently adopted the policy of 70:30 university intake ratios in favor of science and technology (MOE, 2010). As shown in Table 1.1 below, the four bands were in science and technology fields (Engineering and Technology, Natural and Computational

Sciences Medicine and health science, agriculture and life sciences) and the two bands allocated to the social sciences (Business and economics, social Science and Humanities).

Table 1.1 Professional &Alignment of the undergraduate annual intake growth plan Band National Aggregation by university

Program & In different universities	**Band**	**Optimal target shard (%)**	**Annual Intake**				
			2001	2002	2003	2004	2005
Engineering & technology	1	40	24000	36000	44000	44000	44000
Natural & computation science	2	20	30000	3000	22000	22000	22000
Medicine pharmacy & health sciences	3	5	4500	55000	5500	5500	5500
Agricultural & Natural resource	4	5	4500	5500	5500	5500	5500
Business & Economics	5	20	1800	22000	22000	22000	22000
Social Science & humanities	6	10	9000	11000	11000	11000	11000
Anneal converted intake Grand Totals	6	100	90,000	110000	110000	110,000	110,000
Percentage Share of Science & Technology of converted annual intake			70%	70%	70%	70%	70%

Source: - Ministry of Education annual intake enrollment growths and professional and program mix of Ethiopia public higher education: strategy and conversion plan, 2001-2005

As can be seen from the table 1.1 above, engineering and technology education accounts for 40% of the total intake. The target enrollment of 10,000 masters and 2,000 PhDs was expected to in tandem with undergraduate mix.

Policy can set directions and provide a set of parameters with in which implementation can occur. The implementation, however at local and school level dominates the outcome. MoE (4th, 2010) states the ratio of intake sciences and technology and humanities will evolve from 58:42 in 2008/09 to 70:30 in 2014/15. One of the few studies conducted on the issue under this study at

public preparatory schools of Addis Ababa City Government was Demirew.A (2012) and he studied particularly on the practice and challenges of the 70:30 students policy in public preparatory schools of Addis Ababa City Government.

The study indicated that, the practice and challenges of the 70:30 students placement programs suffered from such difficulties as lack of proper attention was given to practical works, lack of properly trained, adequately experienced and committed academic staff contribution and clear vision & understanding about the objectives of any program among the implementers and beneficiary in an organization facilitate the implementation of that program. Although the area has somewhat been studied at narrow scale, there is no study conducted to examine all issues mentioned under this study. Thus, since there is an unfilled gap and need to investigate the area from much-deeper perspective, it is necessary to conduct a detailed study of the current type. Thus, it is these conditions that provided background to this study and justified its being conducted on such an essential component for the improvement of newly designed 70:30 policy. Moreover, because there are factors bearing impact on the 70:30 students placement policy implementation in addition to the before-mentioned ones, there is still exists the need to make further study of the situation necessitating the conduct of the present research particularly as it pertains to the situation in Arada,Gullele,Addis Ketema, Lideta and Yeka sub- cities preparatory schools of the Addis Ababa City Government.

1.2 Statement of the problems

The 70:30 students' streaming policy in the preparatory schools of Ethiopia is a new trend for the country. It was adopted in 2008/09 MoE(4th,2010) The program has been implemented as of 2009/10.The policy/ reform objective is in favor of natural science that aims to expand .Higher education based on, expanding science, engineering and technology fields of studies. The Amharic version of the five years development and transformation plan (2010) States the education and training program focuses on science and engineering field of studies and its quality will be competitive with other countries of similar institutions.

Based on the 70:30 students streaming policy 70% of grade 11 students those who score passing mark in Ethiopian general secondary school certificate examination (EGSCE) are enrolled in natural science stream and 30% in social science stream. The challenge begins at the time of

enrollment of students in the two streams above. Making decision successfully to choose an academic field that fits one's needs best and the policy requirement simultaneously is not simple task. This happens because of the involvement of decisive variables such as interest, ability, job prestige, family and peer influence in the choice. The variables also affect the achievement of students if they are placed in stream in which they are not interested "students have to be aware of various factors that can affect their academic field of choice before they formulate decision to be effective in their learning and future life plan"(Amare Sahile and Mekonnen Abebe,2008).Therefore, satisfying both the needs of the students to pursue whether with natural science or social science streams and the demands of the policy requirement seems very difficult that needs further investigation.

Science subjects are given priority in line with the country's vision to built knowledge based economy. Improving science teaching needs practical works, that is: because: practical works are believed to facilitate the learning and understanding of science. Implementation of practical works needs improved laboratories and pedagogical centers that are equipped with the necessary apparatus equipment, chemicals and other materials. It also needs well organized libraries with related and up- to date reference books, ICT centers, competent and motivated academic and administrative staff. This study will investigate the fulfillments of the necessary preconditions, availability level of facilities and materials and degree of conducting practical works for students required to improve the implementation of newly designed 70:30 students streaming policy in Addis Ababa selected government preparatory schools. Investigating the other school related facilities required to improve the implementation the program also another concern of the study.

The recent trend of students' streaming practice in higher education institutions it is far below the standard set in the guideline 70:30 students' streaming practice in preparatory schools which has been implemented in 2009/10 ESDP (4^{th}, 2010) states that "currently annual intake in science and technology to the social / humane science has reached 58% to 42% respectively , etc. Although all these and some others are essential to the success of the program, the preliminary study made suggested that these have not been effectively and properly taken care of to lead to intended results suggesting that there is a problem in the implementation of the 70:30 Education

program requiring in-depth study. Thus, the study tries to answer the following basic research questions.

1. To what extent does the fulfillment of necessary preconditions influence the implementation of the current 70:30 students' placement Policy?
2. To what degree does the facilities and materials required for running the 70:30 students' placement policies are available in the targeted schools?
3. To what extent does conducting practical works for students influence the improvement of newly designed 70:30 students' placement policy?
4. What are other schools related problems that affect the implementation of the current 70:30 students steaming policy?

1.3 Objectives of the Study

1.3.1 General Objective

The major objective of this study was been to investigate the factors that influencing the implementation of the current 70:30 students' streaming policy in the selected government preparatory schools particularly it focused on W/KelemWork,Medahneyalem,Addis Ketema, Limatminch and Kokebestibah government preparatory Schools those found respectively in Arada,Gullele,Addis Ketema, Lideta and Yeka sub- cities of the Addis Ababa City Government.

1.3.2 Specific objective

Specifically, this research was attempted to realize the following objectives:

1. To examine the degree of influence related to the fulfillment of necessary preconditions on the implementation of the current 70:30 students' placement Policy.
2. To investigate the availability level of facilities and materials required to run the 70:30 Policy properly.
3. To investigate the degree of influence related to conducting practical works for preparatory students on the improvement of newly designed 70:30 students' placement Policy.
4. To assess other school related problems those challenged the implementation of the current 70:30 students streaming Policy.

1.4 Significance of the study

The main purpose of this paper is to bring the existing implementation of the 70:30students' placement policy to the attention of concerned authorities and participants. And also it provides feedback on the strength and weakness of the placement practice to all stakeholders particularly for Addis Ababa city government education bureau.

1.5 Scope of the study

The main focus of this study was to identify the major factors those influencing the implementation the current 70:30 students' streaming practice in Addis Ababa selected government preparatory schools. Even though, there were many preparatory schools including the private one in Addis Ababa. Thus except the above sample schools, this study may not provided an exhaustive account of the 70:30 students streaming practice realities in other preparatory schools of Addis Ababa city government both neither government nor private preparatory schools.

Regarding the participants, the subjects of the study included students, teachers, principals, laboratory technicians, guidance &counselors and librarians of the schools under study. Although there a other variables that can affect the 70:30 students streaming practice the depth of this study would mainly focused on the school related factors of government preparatory schools.

1.6 Limitations of the study

The major limiting factor that the researcher faced were, scarcity of latest literature that could provide relevant information regarding the 70:30 students streaming practice, particularly which focused on the current curriculum with its impact on the depth of the theoretical framework. Moreover, the researcher may face shortage of time to collect all data from all possible sources and to make personal contact with all school principals and policy stake holders.

1.7 Operational Definitions of Key Terms

-Placement:-The act of placing students in natural science and social science.

-Implementation:- The realization of an application /execution/ of a plan/policy/

-Improvement:- The process of a thing shifting from one state to a state considered to be better

-Principal:- The director or senior person in an organization (in this case Schools)

-Influence:- The capacity or power to change or affect someone or something (in this case something that is factors)

1.8 Organization of the Study

This study is comprised of five chapters. The first chapter was an introductory part where background of the study, statement of the problem, significance of the study, limitation and delimitation of the study as well as definitions of terms were presented. The second chapter deals with the review of related literature. The third chapter embraces research methodology and procedures. The fourth chapter is presentation and analysis of the findings. Finally, summary, conclusions and recommendations are presented in the last chapter.

Chapter Two

Related Review Literature

2.1 Rational for Stream of Choice

Higher public investment on discipline and fields that have greater opportunity of real demand internally and abroad. Regarding to this Ministry of education (2008) in fact justifies its assignment of higher proportion of students in the sciences and technology arguing that; Ethiopia is not the only place of employment for graduate of certain discipline. Graduates of medicine, is not the only place of employment for graduate of certain discipline. Graduates of medicine, engineering and technology, the ministry contends, have generally speaking better and greater opportunities within and our side Ethiopia. Minster of education further underlies that, the high risk for Ethiopia today is low investment rather than high investment in science and technology education.

Different studies in developing countries have shown that schools trained students irrelevant to the needs of the countries labor force. A study by Derbessa,(1997) has for example indicated that schools trained students for the wrong kind of job and created skilled labor force inappropriate to the needs of the developing countries. This may arise from lack of agreement of the goals of the economic development strategy of a country with that of the human resource development. Such training of students without considering the specific future of human resource requirement of a country is wastage of resource and creates a large number of unemployed school graduates with inappropriate skills.

And also other studies emphasized on increasing employee ability being an influential factor for students' stream choice .In support of this .White (2007:16) stated "any young people study valued qualification for their relevance to labor market, but little of them placing "intrinsic' values on the study". It can be thus being argued that rationale for stream choice is integrated with occupational aspiration and expectation. On the other hand the labor force requirement of a country depends on the development goals and objectives of the society at a particular time. Therefore, a country emphasizes some kind intelligence or knowledge that relates to its existing stage of development.

The way in which students make stream choice is only one dimension of decision making. Investigating the motive behind their decision is also vital to a comprehensive understanding of choice behavior .Amare and Mekonnen,(2008) indicated, students should be aware of various factors that can affect their stream choice before they make decision to be effective in their learning and future life plan. Interest, ability job prestige, family and peer influence are the major factors that interfere with student's stream choice (Evans14972, Kelly 1980 Hopson 1981, Borich and Tombari 1995, cited in Amare and Mekonnnen 2008).

Information, on the other hand influence decision making. Students may gather information from parent's family member's friend's career advice etc to make their decision concerning their stream choice. White (2007) stated that formal information that comes from career teachers or career officers and informal information that comes from parents and friends affect students' career choice. White further reported that parents can have pervasive influence to shaping young people attitude to education over a long period of time. This shows that parents are the main driver behind the actual decision of student' career choice. Friends can also be a source of information by many students.

Academic performance of a particular institution, availability and adequacy of facilities, the competence of the academic and administrative staff also play major role. Besides, prior experience of students such as stimulation of a particular subject in general secondary school, information obtained from senior students regarding a particular stream, role model individual or students may influence the students' career choice. On the other hand, attention given to practical works, co- curricular activities and, tutorials improve the interest of students for a particular stream even after they are assigned and under study.

2.2 Educational Quality

Quality education is the foundation for all our future that empower us to overcome challenges of social, cultural, economic and technological changes, there is little agreement as to what quality education itself. its definitions open to context, new understanding of educational challenges (UNICEF,(2002) cited in Fekade,2006) Educational quality , however, can be viewed as a set of elements that constituent inputs process and out puts of the education system and provide service that satisfy both internal and external constituent by meeting their expectation.

As rightly pointed out by Ministry of education (2008:7) in the first place, education and knowledge are not a matter of staffing students with minute facts, figures and argumentative syllogisms. It focuses on knowledge how to know and generate and apply knowledge or in learning how to learn and generate and apply knowledge. Thinking and interpersonal communication skills matter and cramming facts do not For a graduate of science and technology to acquire or lack alternative employment opportunities in Ethiopia's current and emerging contexts are a matter of what and how is taught or learnt. Quality process plan and govern the improvement and monitoring the educational quality and quality education in turn assure the employee ability of the graduates.

The delivery of quality education has always been at the top of educational agenda of all countries. Underlying the need for maintaining quality, Fedkade (2006) argue that, quality education has critical importance and is very demanding in the 21st century where countries are confronted with new economic social and cultural challenges. Quality education helps to develop knowledge skills, attitudes and values to confront these challenges effectively and efficiently. it equips individuals with the required tools needed to deal with different tasks they perform in their lives and prepare for the future. "Quality education is essential to meet the increasing needs of learner to be effective in this competitive world" (Ferdessa, 2006)

Putting greater emphasis on science and technology is, however, easier said than done. If the necessary requirements are not fulfilled ahead of time, maintaining the quality of education offered in these fields, particularly in a situation where high proportion (i.e. 70%) may not be easy.

Teaching involves consideration of educational purpose, the design of curricula and pedagogies and the assessment of students' performance .Quality education should address the issues in straight forward and compelling way. Education quality focused on learning objectives, curriculum, teaching and learning method, students learning assessment and quality assurance (Massy, Graham, and Chort, 2007).These focal areas of education quality are interconnected and interrelated to one another in such a way that, curriculum design cannot be done effectively without explicit consideration and agreement on the objective of learning experience. Teaching and students assessment method should depend on learning objectives as well as curriculum

content. Therefore schools should focus on enhancing the quality of learning and begin with learning goals and objective.

How to attain quality education; Hopkins(2003:5) rightly pointed out that: " Improving the quality of education for all (IQEA) school improvement program work from the assumption that schools are most likely strengthen their ability to provide enhanced outcomes for all pupils when they adopt ways of working that are consistent both with their own aspiration and school community and current reform agenda" This means quality of education can be manifested by efficiency and effectiveness of the graduates in the society. Above all quality can be maintained if the education system consider the needs and interests of the pupils and compromise it with the aspiration of the community and the current reform agenda.

The designed policy target is planning and budgeting on the basis of the target and execution accordingly is essential. Identification of materials and facilities, Resource gap and planning and budgeting for them should be part of the execution process. A unified leadership, reliable organization and convinced core and informed academic staff, are required primarily for execution" (MoE 2008:14)

MOE further stated a more strategic issue in the relationship between effective students demand is primarily the stability of the preparatory schools graduates in the basic sciences stream to meet 40% demand of engineering and technology. This is turn considers critical issue of the relevance and quality of science and mathematics education in general secondary and preparatory schools.

Shortage of materials such as workshop and laboratory facilities, particularly affect engineering and technology and to some extent basic sciences and medicines are bands given special emphasis in the 70:30 policy reforms since they require engagement in practical works. Besides location of buildings class size and quality of class rooms, library facilities supply and competence of academe staffs are decisive factors for quality execution of the discipline mix.

Improving quality requires both the design (ways of things intended to work) and implementation considered explicitly. Outcomes may differ from intention, because of either the design may be impractical or due to poor quality of implementation (Massay, Graham and, Chort, 2007).

Thus best design may produce poor outcome if facilities and teaching standards are not maintained. Well designed curricula thought by poorly trained and poorly motivated teacher will not produce the desired learning out comes. Therefore, quality is achieved by meeting the predefined specification (design) in a consistent fashion (implementation).

In the last two decades Ethiopia has made significant progress in education. Access to all level of education has increased in a rapid rate, the number of schools and institutions have greatly increased qualification of teachers also by far better than before. Despite all these actions student's achievement is not sufficiently improved. Regarding to this ESDP(4th,2010) stated, quality is a crucial challenge of the education sector due to rapid expansion of this sub sector, therefore there is an increase need to focus on quality improvement with regard to human and material resources as well as reform process. According to ESDP (4th, 2010) the quality of education seems to suffer because of the rapid expansion of access of education. On the other hand, as stated earlier Ethiopia has vision of transform middle income country in 2025.But without the improvement of the quality of education and technological transformation, development is unlikely. It is therefore essential to show efforts to improve the quality of education. High quality is the key to create, apply and spread knowledge in this very changing world.

Students are the center of education. Their role to be trained in a particular stream as their career has significant role on the implementation of education policy. Recent trends have shown that students have been shown an increasing tendency to study social science/ humanities in higher education starting from preparatory schools in support of this ESDP(4th,2010) indicated the current (2010) natural science social science intake ratio is58:42the increasing tendency of studying social science mismatch with 70:30 students' placement practices which is in favor of natural science declared in 20008/09.

2.3 The Importance of Education in Economic Development

Education in every sense is one fundamental factors of development. No countries achieve sustainable development without substantial investment in human capital. Education enriches peoples understanding of themselves &world. "Human investment revolution in economic though" (Bowman 1960).The basic assumption about education & its link with development strategies is its role in creating the skilled & viable work force.

The role of education as a major driver of economic development is well established & this role will increase as further changes in technology globalization and demographics impacts(Sampson 20003-2004) .formal education is often treated in the societies as an investment in economic development at the same time it is important to realize that education alone, unless accompanied by related activities in other sectors such as industries agriculture, health is incapable of contributing meaning fully to development.

For education to be effective, the manpower demand of different sectors of the economic should be balanced with trained human resource supply delivered by the education system .It is still worth nothing that the demand of man power can only be guessed. It cannot be determined with certainty (MoE, 2008). An education is also an agent in the process of modernization thought, increases in productivity & raises the economic value of its product (singh, 2004).

Education has been accepted as one of the most important method of human capital "Education, increases efficiency and raise the productivity of working people" (Singh, 2004:60). It is the process of talent. The basic assumption about education and its link with development of strategies is its role in creating the skilled and viable work force.

It therefore, not surprising that expenditure on formal education is often treated in the societies and investment in economic development. At the same time it is important to realize that education alone, unless accompanied by related activities in other sectors such as industries agriculture, health is incapable of contributing meaning fully to development. That is because education is not an end by itself but it is a means for development (Raza and Ramachandran.1990) .

The manpower demand of different sectors of the economy should be balanced with trained human resource supply delivered by the education system. It is still worth noting that the demand of manpower can only be guessed. It cannot be determined with certainty (MoE, 2008). Besides, education creates better understanding of the social responsibilities and earning potential of individuals. It is the largest source of human capital consisting of acquired abilities. It plays key role for the achievement of socio economic goals. Education is also an agent in the process of modernization though and increases in productivity and raise the economic value of its product

(Singh, 2004). Education not only increase productivity but also raises the efficiency and is powerful means of gaining social status.

Developing countries made impressive efforts and progress in education in 1960's and 1970's. Both government and individuals gave high priority to education and development of human resource during this period" (Hallak, 1990:7). Education system on the other hand, should be geared to equip its graduate in the new emerging technologies and in the view of rapid technological changes taking place in the world. This demands higher investment in the field of science and technology. Added to that, Citizens and workers of tomorrow should not only know about science and technology but they should be able to use them effectively in their everyday lives. This means, science and technology education are related with practical works that could improve the quality of human life, as a result citizens should practice knowledge of science and technology in their daily life. As rightly argued by razine (et al) "Science is as a way of knowing ,technology is essentially concerned with doing" (1995:29) Science is as a way of knowing and understanding and technology is as a way of adopting and solving problems are important for learning. Razine(et al) further explained , in a real world of research and product development, technology use creative use of science and scientists make creative use of technology .

Economic development was initiated and sustained through continuous innovation created by new knowledge" (Adeboy, 2004:.7) this means, Science and technology generate innovation, and innovation is the driving force for economic development. Adeboy further argued on the importance of the deliberate decision about science engineering and technology content in the curriculum of the educational system.

Technology education in schools leads to technically literate citizens and enable young people to consider a wide range of career in the high performance work places as scientists , mathematicians engineers, engineering technologist and technicians (national science foundation, 1994,cited in Razine(et al), 1995).Education gives response for the demands of human resource development in general and particularly for preparation of large number of professionals with relevant knowledge and skills in diverse fields. It is then a short step to look at the school system and its potential to supply skilled and literate students able to contribute for development.

Developing countries made impressive efforts and progress in education in 1960's and 1970's. Both government and individuals gave high priority to education and devolvement of human resource during this period" (Hallak, 1990:7). Education system on the other hand, should be geared to equip its graduate in the new emerging technologies and in the view of rapid technological changes taking place in the world. This demands higher investment in the field of science and technology .Added to that, citizens and workers to use them effectively in their everyday lives. This means, science and technology education are related with practical works that could improve the quality of human life, as a result citizens should practice knowledge of science and technology in their daily life..As rightly argues by Razine (et al) "science is concerning with knowing, technology is essentially concerned with dong" (1995:29) Science is as a way of knowing and understanding and technology is as a way of adopting and solving problems are important for learning .Razine(et al) father explained, in a real world of research and product development, technology use creative use of science and scientists make creative use of technology.

2.4 Role of Science and Technology for Economic Growth

The world experience demonstrates the fact that capabilities in science and technology serves as an engine of development. it is a pre requisite for industrialization and it sustains industrialization .Besides, the world is moving to become global village in which different parts of the world are rapidly networked and therefore maximizing education relevance to global development is becoming essential (cheng,2001).Globalization seeks knowledge driven economy. This economy is unthinkable without expertise in science and technology. That means those who ae literate in science and technology serve as an engine for economic growth and transformation of a country. Therefore, economic development is the result of technological transformation or innovation; this can be realized by implementing the appropriate policies and strategies. This has been realized both in newly industrialized and early industrialized countries for early industrializes (e.g.; Britain, Germany, and Italy) there was no explicit science and technology policy blueprint followed by any of these countries. Reinter (1996) cited in Adeboye (2004) noted that all members of the early industrialize passed though obligatory passage point in the transition from under development to development. This obligatory passage point, Reinter Further added, required that the countries to production oriented and the role played by the

respective was decisive and active in increasing the natural wealth. The economic development these countries sustained, thorough continuous innovation created by new knowledge. As Adeboye (2004) stated, the newly industrialized countries of East and south East Asia was able to leap- frog industrial transformation. They introduced tested & adopted reforms & innovation in structure /content & method. There for, they learned from the early industrialized experience & achieved their current status in matter of decade rather than centuries

The economic development of industrialized countries is the result of technological transformation. In the words of Adeboy "Much of the economic transformation of the newly industrialized countries (NLC's) of East and south East Asia is due to Technological transformation even, when the process spanned several centauries in the case of early industrializes. Layer industrialized learn from early ones and seemed to shorten the time of transformation".(2004:37)

The task of Science education in any society is to promote scientific literacy, enable school graduates to cope up effectively citizens" integrate knowledge and application of science which in turn leads to integration of technology and social issues in science education" (IBD:20,cited in national education for UNESCO, 2001,P:15)

Studies of newly industrialized countries (NIC'S) that have undergone a very rapid economic transformation in recent years underscore the role that science and technology education provide human skills and competencies .An educational system that emphasizes practical apprenticeship, vocational and technological training is far more relevant for rapid technological development than more academic and theoretical orientation .In support of this, Hamel stated "The economic growth by Japan, Taiwan Singapore and theoretical orientation .In support of this , Hamel stated "The economic growth by Japan, Taiwan Singapore and host countries in Latin America to their harnessing to fruits of science and Technology '(2011:2).Adeboye (2004) also indicated, Nic' started with replication of mature technological capabilities

2.5 Science and Technology for African' Development

The role of science and technology for the development of Africa countries has been understood before half a century. However, though there is a dramatic charge in educational institution in terms of expansion enrollment in sub- Saharan countries, it is reported that there is a problem of relevance in its various dimensions. Regional office for Education in African (1994:15) reported

"the need for scientist and technologist to solve African's development problems has been acknowledged since early 1960's, yet the current statistics reveals that Sub- Saharan Africa has few scientist and engineers."

The mismatch between student's enrollment and adequate scientists and technologists goes beyond merely relating curricula content in Africa realities. For casting the needed resource inputs required to expand science and technology education adequately and mobilizing such resources, reforming educational policies and designing appropriate strategies in accordance to the development objectives of the countries (relevance) in the near future are also compulsory measures to be taken (Adeboye,2004).Expansion of education investment requires clear vision of the educational policy of a country as to where the country intended to be immediately in medium term and in the long run(UNESCO,1994).UNESCO further reported that between 1970 and 1988, students' enrolment expanded eight times fold in sub Sahara Africa. Unplanned expansion has led to an over stretching of physical resources and expansion may undertake as expense of quality.

In support of this, Adeboye (2004:38) stated "Africa should expand its investment in education, even before launching the industrialization , on the ground that, several studies have shown a strong relation between education and industrialization" According to Adebayo, African should first invest on education and use education as springboard for its industrialization. One of the indicators for science and technology focused education is; giving more attention for science and technology human resources development. This includes expansion of educational investment, reorganization of the educational curricula and increases in the science engineering and technology enrollments.

Adeboye further noted that, science and technology for African countries can ne harnessed to accelerate the transition of agriculture from low productivity to high productivity in the entire food chain. Demographic transition; form high population growth, to low population. And environmental transition; from degradation to rehabilitation. Because, among other thing high population growth rate, low agricultural productivity , and environment degradation of African countries need immediate solutions as they are the most fundamental for the least standard living of Africans people. Mindful of this the above argument, Ethiopia, as one of the Africa's countries, has already given due attention for science and technology education. In its last

Education Sector Development, the Ministry of Education made its positions of this regard as follows

The government is committed to strengthening the role of education and training system in building strong scientific and technological foundation for national development expansion of higher education specially in science and engineering is depended in line with Ethiopian vision to become a middle income country by 2025, the capacity for Knowledge creation and technology will also need to be strengthen.(MoE,2010:13)

Proper attention has to be given to search for appropriate resources, mobilization of resource, allocation and improvement of the quality of resources to improve the efficiency and cost effectiveness of education. in addition to these the reorientation of the curriculum towards problems solving approach and creative thinking and prepare the society for fat change of science and technology is the primary concern of African countries to achieve their development objectives.

Underlining the relevance Adeboye,(2004) stated that , relevance of education institutions to the technological transformation of a country, rate of enrollment at different relevance of the curricula to the productive sector of the economy et, are important measures of producing of human resource that a country required to function.

Finally education is widely accepted as a leading instrument to climb out of poverty. Therefore, education; science and technology education in particular, is important for Africans development (Bloom, Canning and Chan, 2006). The focus of science and Technology for African's countries can be harnessed to accelerated the transition of economic development

2.6 Review on 70:30 Students Streaming

One policy document regarding the 70:30 students streaming practice that is "Annual intake of Enrollment Growth & professional & program Mix of Ethiopia Higher Education strategy & conversion plan, 2001-2005; this decampment more Ethiopia planned annual intake of students in higher education to determine the magnitude of the quantitative share of science and technology. As a result, policy on professional and program mix was declared. The Ethiopian education is, therefore transform itself into professional mix of it's under graduate program

institutionally to meet the human resource requirements. In a circular released from the Ministry of Education it was stated "The policy was to achieve the annual intake distribution of students of 70:30 in favor of science and technology of science and engineering fields (MoE, 2008:9). MOE further explained that, the annual Ethiopian higher education (EHE) undergraduate intake would be 110,000 students as of 2002.EC .The annual intake of 110,000 under graduate students on the basis of 70:30 professional mixes by bands and cluster of disciplines would be distributed. According to the document, six bands were identified in the public higher education system.

The policy document further stated that, the Ethiopian higher education (EHE) had transform itself in the professional mix of under graduate program to meet the annual intake and the national objective of the professional mix of its under graduate. Though the implementation of the policy begins at preparatory schools, this document has not mentioned much, how to implement the program at the preparatory schools level. However, the full conversation of the 70:30 students' placement practice has been fully established in preparatory schools system in 2003E.C

The document emphasized that, each public institution should give should give immediate priority to execute properly the professional mix with in the time line. The government on the other hand, assist each institution financially to effect the conversation on the basis of the actual need, coordinate and follow up the implementation process.

The policy was fixed and mandatory particularly at the level of the band and cluster, the discipline within the bands in the conversion period (2001-2005). This period was only one part of the whole process of institutional transformation. It includes curricula reviews development and academic development process. Its flexibility beyond the conversion period would be based on empirical evidences and justification within and on the basis of policy consideration

2.7. Education System Profile in Government Preparatory Schools

Preparatory Schools in Ethiopian context prepare students for higher education. It is the second cycle of secondary education that comprises grade 11 and 12. It allows students for specialization in wither natural science or social science. Students who have complete preparatory education and scored passing mark in the iterance examination "are ready to continue the tertiary level education, because they have knowledge, abilities and skills of

analysis, organization , research and evaluation, which qualify for higher education" (Ethiopian national agency for UNESCO,2001:27).

Coming to the situation of Addis Ababa preparatory schools, the target of the present study, the improved standard of secondary of secondary and preparatory schools manual stipulates that Preparatory schools are built on an average area of 30,000 to 60, 00 square meters having their own fenced territory (AAEB, 2001). The standard size of buildings for different purposes (administration, classrooms, library, laboratory etc) is also clearly specified. Specific location of buildings, availability of sport field's garden areas and other social services are also mentioned in this manual.

2.7.1 Staff profile of school

In any service organization including school among the various resources required fundamentally, the most important is human resource "Quality service depends directly or indirectl1y on the capability commitment and motivation of people who provide it as school or college "(Bush, 1994, cited in Sime, 2004:30). It is therefore important to review the human resource in puts (academic and administrative) profile for preparatory schools.

A. Academic staff profile

The supply of teachers with the desired quality and profile is the primary input factor for the delivery of quality education. To maintain quality education the supply of trained teachers must be ensured. In relation to this, ESDP(4^{th},2010) stated, the required qualification level of secondary schools teachers have been changed from and education bachelor degree course to a degree course in major field plus one year added on professional teacher training in practice however, one year is added on professional teacher training is not implemented.

B. Non- teaching Staff profile

In any school including preparatory schools non- teaching staff are those employees who give different services other than teaching .They lead, facilitate and support the teaching and learning process. Their number may vary depending on the size of the particular school.

According to the improved secondary and preparatory school standard manual (AAEB), their educational profile however is the same regard less to the size of the schools. The non- teaching staff include: principals, student guidance and counselor, human resource and finance assistance core processor, assistance finance core process or property assistance core processor, laboratory technician, librarian, secretary, record officer, janitor, and guard

2.7.2 Educational Facilities of Preparatory schools

School buildings, facilities in schools and the production and distribution of materials are essential factors in implementing an educational program in preparatory schools. The areas where schools are to be constructed, the positions of different schools blacks, the availability or laboratories libraries and work shop, the conditions and the capacity of each classrooms etc are the major features which signify the quality of physical inputs. The size and quality these physical inputs are clearly specified in the improved secondary and preparatory school standard manual (AAEB, 2008). Regarding to these physical inputs, the educational and training policy of Ethiopia (MOE, 1994:27) states that "In order to promote the quality, relevance and expansion of education, due attention will be given to the supply, distribution and utilization of educational martial's, educational technology and facilities."

Finally, the school can be constructed from bricks, blocks or stone .Every preparatory school is also expected to have a supply of water, electricity, telephone, fax and internet services. The library reading room must accommodate 20% of the total students' population with 1.67 meter care area per students.

A. offices

Offices are used to facilitate schools' activities. The schools 'most day to day activities are carried out in the offices .Especially for preparatory schools where students are being prepared for higher education, several offices are needed for various purposes the various offices required and their corresponding areas are listed in Appendix H

B. Other Rooms that Give Different Services

These include classrooms which are the basic elements in very preparatory schools where teaching and learning process is implemented, various laboratories to conduct practical works,

workshops to prepare teaching aids, halls and department offices. The standards size of each is given in the appendix I.

In addition to these the standard size of the classroom is 40 students per class. Though they are plenty to present their list here, the required apparatus, equipment, chemicals for each laboratory and hand tools, working tables for workshops are specified. Besides, office furniture and other materials are indicated in this manual.

Generally, on this chapter I try to discuss about rational for stream of choice. this topic important for this research how students stream their choice and also discuss the importance of education in economic development, the role of science and technology for economic growth this all topics implies without science there is no dynamic change in the economy.

Chapter Three

Research methodology and Procedure

This chapter deals with the research design, sources of data, samples and sampling techniques, data gathering instruments, procedures of data collection and methods of data analysis.

3.1 Research Design

The purpose of this study was to investigate the factors influencing the implementation of the current 70:30 students' streaming practice in preparatory schools those found in some selected Sub-cities of the Addis Ababa City Government.

In order to undertake this study a descriptive survey design was employed. Questionnaire was employed largely to gather data from a relatively large size of respondents. The design used as it is useful to study current practice and have a better understanding by using a large segment of the population as samples and obtain accurate description of a situation (Kothari, 2006; Brown and Dowling, 1998).

Descriptive research design helps to describe and interpret current condition (Best and Kahn, 2003).Best and Kahn(2003) state that descriptive research concerned with conditions or relationships that exist, opinions that are held, processes that are going on, and effects that are evident or trends that are developing. Moreover, in order to collect more in-depth information on the area under investigation, qualitative data gathering method was been used through employing interview and non-participant observation. This enriches and supplements data obtained through questionnaires.

3.2. Sources of Data

Primary and secondary sources of data were included for this study. The sources of primary data were principals, Teachers, librarians, lab-technicians and students of the targeted schools. The sources for secondary data were documents such as research documents on such issue, magazines, Journals' and also online sources. Data gathered from primary sources was been further subtending and triangulating by secondary data sources.

3.3. Samples and Sampling Procedures

The Addis Ababa City Government has 10 sub-cities. Out of this, 5 sub- cities, Arada, Gullele, Addis Ketma, Lideta and Yeka sub- cities were selected for this study using purposive sampling technique.

There are at most two government preparatory schools currently operating across each sub-city in Addis Ababa City Government thus, half of the schools (about 50 per cent) was selected for the study since the population is very small and including about one out of two of the total number of schools would provide adequate data and information required to generalize for the population. Therefore, one preparatory school from each sample sub-cities was been selected for this study.

Since the schools have more or less similar characteristics, simple random sampling technique was been used to select the samples schools. Regarding this, Cress well, (2005), argues that, in a simple random sampling technique, every individual has equal chance of being selected and the chance of one individual does not affect the chance of another individual.

Accordingly, W/KelemWork,Medahneyalem,Addis Ketema, Limatminch and Kokebestibah preparatory Schools from ,Arada,Gullele,Addis Ketema, Lideta and Yeka sub- cities respectively were selected for the study.

The subjects of the study were principals, teachers, lab technicians, librarians, guidance and counselors and students. Since there are 4 principals in each sample schools, total of 20 principals in the 5 sample schools. Thus, half of them (50%) were being taken as sources of primary data for the study. This is because the size is small and manageable and they have special responsibility to follow, support and document the programs of 70:30 students placement.

The total number of librarians in the 5 schools is 10. There were 2 librarians in each school. 1 of the librarians (about 50%) was been selected for the study .Since the population is relatively smaller and including about 5 out of 10 of the total number of librarians and 5 out of 10 guidance & counselors would provide adequate data and information required to generalize for the population. A minimum of one librarian and one guidance & counselor was been selected from each of the sample schools. Regarding lab technicians, there are only one lab technician for

each science subjects(physics, chemistry &biology) in sample schools, thus all of them 15 (100 %) were selected for this study.

Table 3.1. below Showed that the detail characteristics of population , sample size and percentage of the five targeted preparatory schools those found respectively in Arada,Gullele,Addis Ketema, Lideta and Yeka sub- cities of the Addis Ababa City Government.

Table 3.1 Characteristics of population, sample size and percentage of the five targeted schools

No	Name of Schools	Sub-city	Total No of Teachers	Sample size		Total No of Students	Sample size		Total No of Prencipals	Sample size		Total No of Librarians	Sample size		Total No of counsolors	Sample size		Total No of Lab-	Sample=Total	Sum for each		
				N	%		N	%		N	%		N	%		N	%	N	%	Pop	samp	%
1	Medahniale m	Gull ele	140	42	30	2247	225	10	4	2	50	2	1	50	2	1	50	3	3	2394	271	10
2	W/kelemwor k	Ara da	66	20	30	895	90	10	4	2	50	2	1	50	2	1	50	3	3	968	114	12
3	Addis Ketma	Add is Ket ma	85	25	30	1800	180	10	4	2	50	2	1	50	2	1	50	3	3	1892	209	11
4	Limat minch	Lid eta	56	17	30	760	76	10	4	2	50	2	1	50	2	1	50	3	3	823	97	12
5	Kokebe stibah	Yek a	101	30	30	2117	218	10	4	2	50	2	1	50	2	1	50	3	3	2225	252	10
Total sum			448	134	30	7819	789	10	20	10	50	10	5	50	10	5	50	15	15	8322	931	11.6

As can be seen from table 3.1 above the total population of this study was been **8322**out of this total of **931** respondents from the five sample preparatory schools were selected as a sample the study. Out of these total sample **134** teachers, **789** students, **10** principals, 1**5** laboratories technicians', **5** libertarians and 5 school guidance & counselors were taken as the respondents of the study.

3.4. Instruments and Procedures of Data Collection

3.4.1. Data Collection Instruments

For the purpose of collecting appropriate data, the researcher was implemented the following three data collection tools: Since the study was used both quantitative and qualitative methods, data was been collected using questionnaires, interview and non-participant observation. Employing multiple instruments of data collection help to combine, strengthen and amend some of the inadequacies and helps triangulation of data Cress well, (2005).

Questionnaire

Questionnaire was chosen as an instrument since it helps to collect data in a more efficient and manageable way from a large population. According to Selinger and Shohamy (1989) a questionnaire is widely used as one of data collection tools, in particular to collect data on phenomena which are not easily observed, such as attitudes and self-concepts. It is also used to obtain background information about the research subjects Koul (1984). The questionnaire will be used to collect information from teachers, department heads and students. It would be developed in English based on the basic research questions. The sources of the items were literature on the area and previous studies.

The researcher developed both structured/closed ended and unstructured / open ended items used to collect data from teachers and students. The structured /close ended items used to gather data from teachers had four parts they deal with factors that influences the70:30 students streaming policy, fulfillment of necessary preconditions on the implementation of the current 70:30 students' placement policy , the availability level of facilities and materials required to run the 70:30 program properly, the degree of influence related to conducting practical works for preparatory students on the improvement of newly designed 70:30 students' placement Policy and other school related problems those challenged the implementation of the current 70:30

students streaming Policy respectively . The number of items was **34** in five sections. The first was about respondents' personal characteristics and includes **5** items. The second focused on the issues related to fulfillments of necessary preconditions required for the implementation of the 70:30 students' steaming practices and includes **5** items for both teachers and students. The third consisted of **10** items (for 4 sub sections) dealing about facilities and materials available in sample schools. Out of **10** items (for 4 sub sections), the first **3** items focused on Library, the second **3** items about Science Laboratory, the third **2** and the fourth **2** items were dealing about Class rooms and Other School Facilities respectively. The fourth section consisted of **4** items deals about practical works that influence the 70:30 students' placement practice. The last section includes 5 items concerning with other school related problems (facilities) such as streaming assignment, adequacy weakly load, commitment and competency of teachers and commitment of the school administration to implementation the program. The items in these sections were five-scale Liker type ranging from **strongly agree** (1) to **strongly disagree** (5) for both students and teachers. The source of the items was literature and previous similar studies. To draw further information from the teachers **5** open ended items for teachers would be included in this section. All the other **29** items of the questionnaires were close-ended.

Interview

Selinger and Shohamy (1989) point out that the use of interview as a data collection instrument permits a level of in-depth information, free response, and flexibility that cannot be obtained by other procedures.

Interview was chosen as an instrument since it permits the exploration of issues, which might be too complex to investigate through questionnaires and also justified on the grounds that it allows better chance to explain more explicitly what interviewees know on the issue, Best and Kahn (2004).The interviews was used to collect information from school principals, Librarians, guidance &counselors and Lab-Technicians. The interview would be developed based on the basic research questions. The number of items was **8** for principals and **6** for Librarians, **5** for Lab-Technicians and 6 for guidance &counselors. The sources of the items were literature and previous studies. The interview would have two parts: the interviewees' personal characteristics and items relevant to factors that influence the current implementation of the 70:30 students' placement practice in governmental preparatory schools of Addis Ababa City. Among the

various types of interviews available, the type of interview used in this study would be semi-structured.

Physical Observation

Observation entails the systematic noting and recording of events, behaviors and artifacts in a social setting Kitchen and Tate, (2000). Observation focuses upon people's behavior in an attempt to learn about the meanings behind and attached to actions. Rather than asking peoples about their views and feelings, you watch what they do and listen to what they say (Ibid). It is true that observation has always been considered as a major data collection tool, because it allows the study of a phenomenon at close range with many of the contextual variables present Selinger and Shohamy (1989); Koul (1984). Thus, the main purpose of observation would be to ascertain the prevalent problems given by the respondents during the interview. This was to say that the observation is mainly doing to cross-check whether the problems forwarded by the principals and teachers.

Table 3.2 Areas of Observation and its Check – list format

No	Observation related issues	observation time	Time duration	Check-list format	subjec
1	School teaching learning Class room such as, black board, tables, chairs, size, plasma setup and electric installation	At any work day	One day		Resear
2	Science Laboratory such as room Size, chemicals, apparatus, charts, cleaning agents and electric system.	>>	>>		>>
3	Library organization such as reading furnishers, book shelf's, adequate reference books and light & ventilation system.	>>	>>		>>
4	ICT Center such as fur etchers, computers with internet access, electric system, class size and white board.	>>	>>		>>

The physical observation would implement by the researcher him selves using cheek list and it would apply on the issues relate school facilities included, the apparatus and chemical request, formats, the availability chemical and equipments list, the demonstrated activities list, etc. the physical conditions of the laboratory rooms, the standard of chair and tables, the room size and availability of some facilities such as ventilation, water system, electric installation and heat source were observed. Additionally the availability of cleaning agents such as detergents, toilet soap was also observed. The items for physical observation would be Yes or No regarding

the above issue. Even though observation conducted by the researcher and its duration depends upon the actual conditions of each sample school, fortunately the observation accomplished within five days in five sample schools (one day for each sample school). The purposive sampling technique would be used to select the area of observation .this is because of, observation administered on particular issues of the study that are not fully addressed by questionnaire and interview.

3.4.2. Standardization of Data Gathering Instruments

The standardization of the data gathering instruments were passed through the following processes. First of all, on the basis of the objectives of the study, the existing literatures and the instructional objectives stated in particularly on the factors that influence the current implementation of the 70:30 students' placement practice in governmental preparatory schools of Addis Ababa City, After the preparation of the instruments on variables of the study, tryout was been done on the items to get validity and reliability information. The preparation and testing the relevance and consistency of the items were done by consulting two prospective graduate students of Educational Planning and Leadership and two instructors' to comment on it. Those have knowledge and experience in testing and measurement.

Reliability Test

Reliability of the instruments was obtained by using the test- retest reliability. Fraenkel and Wallen (1996) argue that for most educational research, stability of scores over a period of two months is usually viewed as sufficient evidence of test-retest reliability. Therefore the researcher test-retested the instruments on a small number of principals, teachers and class representative students. The items were tested using Cronbach Alpha and it gave a reliability figure of 0.79, which is above the recommended reliability of 0.7 Kaplan and Saccuz, (1993)

Validity test

According to Amin (2005) content and construct validity is determined by expert judgment. The test try out was conducted on two directors, ten class representative students and twenty teachers from different sub-cities preparatory schools who found out of the sample preparatory

schools .The validity of the questionnaire was calculated by using the Content Validity Index formulae and it gave a figure of 0.7. Kathuri and Palls (1993) argue that instruments with validity confident of at least 0.7 are accepted as valid in research.

3.5 Procedure of Data Collection

The purpose of this study is to assess the factors that Influencing the Current Implementation of the 70:30 Students Placement Practice at W/KelemWork,Medahneyalem,Addis Ketema, Limatminch and Kokebestibah preparatory Schools those selected from ,Arada,Gullele,Addis Ketema, Lideta and Yeka sub- cities respectively in Addis Ababa City Administration. Before starting the actual data collection it was consider conducting the pilot testing. Pilot test was conduct this is because how well the particular problem will go, secondly to what extent a particular method of data collection was suitable and how much time take to complete the instrument . Accordingly ,with some modifications and Clarifications, the final instruments was been develop and used for the purpose of this study .The questionnaire were design and administer by the researcher to all subjects of this study.

3.6 Method of Data Analysis

Following the completion of the quantitative data collection, the data was checked for completeness, consistency and clarity to assure its accuracy. Leary (2004) suggested that descriptive statistics are used to describe and summarize the basic features of the quantitative data. Furthermore, the author stated, they are used to present quantitative descriptions in a manageable and intelligible form. Numerical and some textual information were collected and raw data were organized systematically (tabulated). Each participant's responses were recorded in the same way on the data coded sheet horizontally against the sequential number give for each respondent answer sheet. The total sample size and the overall percentage return along with the response rate for each item well identified these scores or codes of assigned for each variables recorded in the data code sheet were served as the key for numerical analysis. Some items that independently measured the same issue were treated individually. The other that depends up on one another to measure a given issue were grouped in to a cluster and treated as a single outcome. The responses of open ended or un-structured items (interview and cheek list) were categorized according to pattern or similarity of the responses was analyzed qualitatively

together with quantitative statically description. Ideas or subjections forwarded by the majority of the respondents were presented as the findings of this study.

Chapter Four

Presentation, Analysis and Interpretation of Data

In this section, the data collected are presented, tallied and interpreted. Once the research data have been collected using different types of data collection procedures as described in the previous chapter, the next step was to analyze those data. The tallies were counted and registered frequency that showed the number of respondents. Then, the percentage, mean standard deviation were computed. The data collected through Interviews and observations have been also reported.

4.1 Bio Data of the Participants

Presented in Table 4.1 below is bio data of this study subjects those were principals, teachers, lab technicians, librarians and students in selected sample preparatory school. They were included with the assumption that they would light on the major data collected through the questionnaire and interviews.

No	Characteristics	Participants											
		Teachers		Librarians		Lab technicians		Principals		Counselors		Students	
		No	%	No	%	No	%	No	%	No	%	No	%
1	**Sex**												
	Male	84	63	2	40	11	73.3	7	70	3	60	388	49.2
	Female	50	37	3	60	4	27.7	3	30	2	40	401	50.8
	Total	134	100	5	100	15	100	10	100	5	100	789	100
2	**Age**												
	14-17years	-	-	-	-	-	-	-	-	-	-	-	-
	18-22years	-	-	-	-	-	-	-	-	-	-	702	89
	23-30 years	39	29	-	-	12	80	-	-	-	-	87	11
	31-39 years	45	33.6	2	40	3	20	3	30	-	-	-	-
	40-46 years	27	20.2	2	40	-	-	4	40	5	100	-	-
	>46years	23	17.2	1	20	-	-	3	30	-	-	-	-
	Total	**134**	**100**	**5**	**100**	**15**	**100**		**100**	**5**	**100**	**100**	**100**
3	**Qualification**												
	Diploma and below	-	-	5	100	4	26.7	-	-	-	-	-	-
	Bsc.	108	80.6	-	-	11	73.3	4	40	2	40	-	-
	MA	46	19.4	-	-	-	-	6	60	3	60	-	-
4	**Teaching Load per week**												
	Less than 10periods	20	15	-	-	-	-	-	-	-	-	-	-
	10—15	76	56.7	-	-	-	-	-	-	-	-	-	-
	16—20	38	28.4	-	-	-	-	-	-	-	-	-	-
	Above 20	-	-	-	-	-	-	-	-	-	-	-	-
										-	-		
5	**Work experience**												
	1—5years	27	20	-	-	6	40	-	-	-	-	-	-
	6—10years	33	24.6	3	60	9	60	2	20	-		-	-
	11—15years	32	24	2	40	-	-	3	30	2	40	-	-
	16—20years	21	15.7	-	-	-	-	2	20	2	40	-	-
	21—25year	12	9	-	-	-	-	2	20	1	20	-	-
	Greater than 25 years	9	6.7	-	-	-	-	1	10	-	-	-	-
	Total	**134**	**100**	**5**	**100**	**15**	**100**	**10**	**100**	**5**	**100**	-	-
6	**Students grade level**												
	11^{th}	-	-	-	-	-	-	-	-	-	-	393	49
	12^{th}	-	-	-		-	-	-	-	-	-	396	51
	Total	-	-	-	-	-	-	-	-	-	-	789	100

As illustrated in Table 4.1 above, 63% (84) of teachers, 40% (2) of librarians , 73.3%(11) of lab techinicians,70% (7) of principals ,60%(3) of guidance & counselors and 49%(388) of students were male while 37% (50) of teachers, 60% (3) of librarians , 27.7%(4) of lab techinicians,30% (3) of principals ,40%(2) of guidance & counselors and 51%(401) of students respectively were female. Regarding age, 29% (39) of teachers, 80% (12) of lab technicians and 11%(87) of students respectively were in the range of 23-32 years while the rest only 89% (702) of students were in the range of 18-22 years old.. whereas, 33.6%(45) of teachers,40% (2) of librarians 20%(3) of lab technicians and 30%(3) of principals were in the range 31-39 years while 20.2% (27) of teachers, 40% (2) of librarians , 40% (4) of principals and 110%(5) of guidance & counselors were in the ranges of age from 40 to 46 years. The rest 17.2 %(230 teachers, 20 %(1) of librarians and 305(3) 0f principals were at the age level of 46 years.

Regarding academic qualification, 100 %(5) of librarians and 26.7 %(4) of lab technicians were the holders of diploma and below it whereas, 80.6% (108)of teachers,73.3% (11) of lab technicians 40%(4) of principals and 40%(2) of guidance & counselors had first degree (BSC&BA) and then, the other 19.4% (46) of teachers, 60%(6) of principals and 60%(3) of guidance & counselors respectively were the holders of their second degree (MSC&MA)

Concerning teaching load, according to teachers respondents, 15 %(20) of teacher handled <10, 57 %(76) of teacher handled 10-15 and 28 %(58) of teacher handled 16-20 periods per week. As most teachers wrote in open ended part of the questionnaire, teaching overload was one of the most challenging factors that hindered them from performing induction program effectively.

In accordance with data in Table 4.1, 20 %(27) of teacher and40 %(6) of lab technicians reported that they were in the ranges of experience 1-5 years while 25%(33) of teacher,60%(3) of librarians,60%(9) of lab technicians and 20%(2) of principals reported that they were in the ranges of experience 6-10 years. Whereas 24%(32) of teacher, 40%(2) of librarians, 30%(3) of principals and40%(2) of guidance & counselors respectively were in the ranges of experience 11-15 years the rest 24.7 %(33) of teaches, 40%(4) of principals and 60%(3) of guidance & counselors respectively were in the year 16-25work experience in teaching and only 9 %(7) of teacher and10 %( ) Of principals had 25work experience above 25 years. Regarding sample students grade level compos ion,

almost equal percent of them selected 51 %(396) of students were12th grade and 49 %(393) of students were 11th grade students.

4.2 The impacts of factors related to fulfillment of necessary preconditions for the implementation of the 70:30 students' steaming practices.

As indicated earlier fulfillment of necessary preconditions those required for implementing the 70:30 students' placement Policy is one of the influential factors that can play a great role to challenge the implementation and improvement of the newly designed 70:30 students' placement in varies government preparatory schools of Addis Ababa city .Thus, to identify the more influential factors related to installation of the required preconditions Principals, Teachers, Librarians, Lab technicians, guidance & counselors and Students themselves are more closed; respondents were asked to show indicate their opinions by choosing from the given alternatives through the scaled liker types ranging from strongly agree (1) strongly disagree (5).

4.2.1. Teachers response about the impacts of factors related to fulfillment of necessary preconditions for the implementation of the 70:30 students' steaming practices.

Table 4.2 showed the responses of teachers about the impacts of factors related to fulfillment of necessary preconditions for the implementation of the 70:30 students' steaming policy.

No	Questions/items	Items Value										$\bar{X}$	S. D
		1		2		3		4		5			
		Fr.	%	Fr.	%	Fr.	%	Fr.	%	Fr.	%		
1	All stakeholders have clear understood about the role of 70:30 student's placement for the development of science and technology	100	74.6	22	16.4	3	2.2	5	3.7	4	3	1.4	0.9
2	The 70:30 implantation practice have been communicated to all implementers and beneficiary through a clear guide line and policy document of the program	19	14.2	102	76	7	5.2	4	3	2	1.4	2.01	0.7
3	Orientation regarding the 70:30 student's placement have been given to students before they are assigned to their respective stream	1	0.7	4	3	4	3	18	13.4	107	79.8	4.7	0.7
4	The school administration allocate adequate budget to fulfill the required facility of the program	4	3	7	5.2	3	2.2	99	73.8	21	15.6	3.9	0.8
	GM											2.5	1.3

Key: - 1= strongly agree, **2**= Agree, **3**= Undecided, **4**= Disagree, **5**= strongly disagree

$\bar{X}$= Mean, **S.D** = standard deviation **GM**=grand mean, **F**=frequency, **%** = Percent

A close looks at of the data in the Table 4.2 above, gives a grim picture that respondents about the impacts of factors related to fulfillment of necessary preconditions for the implementation of the 70:30 students' steaming policy. The means scores reported there indicate that the factors range from 4.4 to 3.9 (with a grand mean of 4.2) indicating high degree of impacts of the factors that mentioned on items3 and 4 above. A closer look at of the specific scores is even more telling. As could be understood from scores of item1($\bar{X}$=1.4; SD=0.9) respondents are of the opinion that the factors related to the understanding about the role of 70:30 student's placement for the development of science and technology in particular show less practice of the implementation of the program. Moreover, scores of item 2($\bar{X}$= 2.01; SD=0.7) depicts that respondents are of the opinion that the factors related to the communication of the 70:30 implementation policy have been communicated to all implementers and beneficiary through a clear guide line and policy document of the program which shows its less impact for practice of the implementation of the program.

4.2.2 Teachers responses about the availability level of facilities and materials required to run the 70:30 policies properly.

The availability of facilities and materials required for implementing the 70:30 students' placement policy also the other influential factors that can play its own role to make difference on the implementing and improvements of the current 70:30 students' placement policy in varies government preparatory schools of Addis Ababa city .Thus, to identify the more influential factors among these required facilities the above mentioned subjects are more effective again the respondents were asked to show indicate their opinions by choosing from the given alternatives through the scaled liker types ranging from **strongly agree** (1) to **strongly disagree** (5).

Table 4.4 showed the responses of teachers about the availability level of facilities and materials required to run the 70:30 programs properly.

No	Questions/items	Items Value										$\bar{X}$	S. D
		1		2		3		4		5			
	A. Library	Fr.	%	Fr.	%	Fr.	%	Fr.	%	Fr.	%		
1	The availability of relevant reference books, teaching aids	15	11.1	107	79.8	4	3	6	4.5	2	1.5	2.1	0.8
2	The availability of sufficient reading rooms with enough furniture and electric systems	102	76	20	15	7	5	2	1.5	3	2.2	1.4	0.8
3	The functionality the library out of normal class time	75	56	47	35	1	0.7	7	5	2	1.5	1.6	0.9
	GM											1.7	0.8
	B. Science Laboratory												
1	The availability of lab manual, enough apparatus & chemicals, professional lab technician,	19	14	103	77	3	2.2	5	3.7	4	3	2	0.7
2	The availability of preparation room with functional electric, water & heat for different streams	65	48.5	32	24	13	10	15	11	9	7	2	1.3
3	The availability of adequate lab equipment's budget	81	60.4	41	30.5	7	5	4	3	1	0.7	1.5	0.8
	GM											1.8	0.9
	C. Class rooms												
1	The capacity of class room	15	11	12	9	28	21	38	28.3	41	30.5	3.6	1.3
2	The availability of class rooms with enough furniture, plasma TV, black board and electric systems	16	12	21	16	6	4.4	46	34.3	45	34	3.8	1.5
	GM											3.7	1.4
	D. Other School Facilities												
1	The availability of appropriate computer room with enough computers & internet access, comfortable pedagogical centers, comfortable technical drawing rooms	46	34.3	66	49.2	13	10	6	4.4	3	2.2	1.9	0.9
2	The capacity of computer room, pedagogical center and technical drawing rooms	71	53	41	30.5	7	5	11	8.2	5	3.7	1.7	0.9
	GM											1.8	0.9

Key: -1= strongly agree, 2= Agree, 3= Undecided, 4= Disagree, 5= strongly disagree

$\bar{X}$= Mean, **S.D** = standard deviation **GM**=grand mean, **F**=frequency, **%** = Percent

The result in Table 4.4, the respondents response on the opinion of items 1,2 &3 with mean scores range 2.1, 1.4 and 1.6 (GM = 2.3) regarding the opinions about the organization of school libraries such as, availability of relevant reference books, teaching aids, sufficient reading rooms with enough furniture & electric systems and the functionality of the library out of normal class time indicated that, the availabilities of the above mentioned library facilities of their schools also have a great impact on the proper implementation of the current 70:30 student's placement policy improvement. In a similar fashion, the respondents response on the opinion of items 1,2 &3 with mean scores of 2, 2 & 1.5 (with GM = 1.8) regarding the organizations of science laboratories such as, the availability of lab manual, enough apparatus & chemicals, professional lab technician, preparation room with functional electric, water & heat systems and adequate lab equipment's budget, showed that the high degree of impacts in the process of effective implementation to gain a better result that meet the objectives of the 70:30 students streaming policy. On the other hand, the respondents response for the statements of items 1&2 with mean scores of 3.6 & 3.8 (with GM = 3.7) regarding the capacity and availability of class rooms with enough furniture, plasma TV, black board and electric systems taking as a factors, the opinions of the majority respondents indicated that there is no problems in their schools related to the required class rooms facilities. While related to others school facilities such as the capacities and availabilities of appropriate computer room with enough computers & internet access, comfortable pedagogical centers & technical drawing rooms , the respondent's response for the opinions of items 1&2 with mean scores of 1.9 &1.7 (GM = 1.8), the majority of respondents argued that shortage of the above mentioned others school related facilities are the basic challenges that faced the implementers to improve the result of the current 70:30 students placement policy in selected governmental preparatory schools of Addis Ababa city Administration.

4.2.3 Teachers responses about the degree of influence related to conducting practical works for preparatory students on the implementation of newly designed 70:30 student's placement policy.

Table 4.6 Below showed the responses of teachers about the degree of influence related to conducting practical works for preparatory students on the implementation of newly designed 70:30 student's placement policy.

No	Questions/items	Items Value										$\bar{X}$	S.D
		1		2		3		4		5			
		Fr.	%	Fr.	%	Fr.	%	Fr.	%	Fr.	%		
1	Students attend laboratory demonstrations in the lab	10	7.4	17	13	28	21	38	28.3	41	30.5	3.7	1.3
2	Students are able to identify some basic apparatus and equipments	-	-	5	4	11	8.2	51	38	67	50	4.1	1.3
3	Students have developed skill to carry out laboratory demonstrations	16	12	21	16	6	4.4	46	34.3	45	34	3.8	1.5
4	Students have developed skill of writing laboratory reports	-	-	8	6	18	13.4	67	50	41	31	3.7	1.3
	GM											3.8	1.3

Key: - 1= strongly agree, **2**= Agree, **3**= Undecided, **4**= Disagree, **5**= strongly disagree

$\bar{X}$= Mean, **S.D** = standard deviation **GM**=grand mean, **F**=frequency, **%** = Percent

As could be seen, Table 4.6 above gives integrated image of those respondents about the role of practical works conducted in preparatory school by students to achieve the target of the current 70:30 program. Thus, respondent's response for the opinions of items 1 to 4 considering as part of influential factors on students achievements in preparatory schools level. The mean scores reported there indicated that the factors range from 3.7 to 4. 1 (GM= 3.8) indicating the high degree of impacts on students result having most of practical activities are not conducted with the opinion of the whole items stated in table 4.6 above

4.2.4 Teachers responses about the other school related problems that challenged the implementation of newly designed 70:30 student's placement policy.

Table 4.8 below showed the responses of teachers about the other school related problems that challenged the implementation of newly designed 70:30 student's placement policy.

No	Questions/items	Items Value										$\bar{X}$	S.D
		1		2		3		4		5			
		Fr.	%	Fr.	%	Fr.	%	Fr.	%	Fr.	%		
1	Some students are forced to join in natural science stream without their choice	46	34.3	66	49.2	13	10	6	4.4	3	2.2	1.9	0.9
2	There are inadequate teachers in your school for each subjects	9	7	17	13	29	22	43	32	36	27	3.7	1.3
3	Weekly load for science teachers is too large to engage in other supportive activities	7	5.2	12	9	16	12	34	25.3	65	48.5	3.8	1.5
4	School teachers are not committed in implementing the practice	11	8.2	8	6	15	11	25	19	75	56	4.1	1.3
5	The school administrator's lack of commitments to implement the practice	46	34.3	66	49.2	13	10	6	4.4	3	2.2	1.9	0.9
6	The teachers are not competent to run the program	9	7	10	6	17	13	33	25	65	48.5	3.8	1.5
	GM											3.2	1.2

Key: - 1= strongly agree, **2**= Agree, **3**= Undecided, **4**= Disagree, **5**= strongly disagree

$\bar{X}$= Mean, **S.D** = standard deviation **GM**=grand mean, **F**=frequency, **%** = Percent

As clearly understood from Table 4.8, the respondents response on the pinion of items 1 & 5 in the above table 4.8, with equal mean score of 1.9 each (GM=1.9), indicated that the high degree impacts of students enforcement to join field of stream without their interest and lack of the commitments of school administrators are the basic influential factors that challenge the quality of implementation of newly designed 70:30 student's placement policy. On the other hand, the respondents response for the opinions of the rest items (2, 3, 4 & 6) in table 4.8 above regarding adequacy, weekly teaching load, competency and commitments of teachers to implement and run the implementation of newly

designed 70:30 student's placement policy taking as a factors, majority of the respondents argued that there is less degree of challenge that resist the implementation and running of the current 70:30 students placement program.

4.3. Other school related problems that challenged the implementation of newly designed 70:30 students' placement policy

4.3.1 Students responses about the impacts of factors related to fulfillment of necessary preconditions for the implementation of the 70:30 students' steaming policy.

Table 4.3 showed the responses of students about the impacts of factors related to fulfillment of necessary preconditions for the implementation of the 70:30 students' steaming policy.

No	Questions/items	Items Value										$\bar{X}$	S.D
		1		2		3		4		5			
		Fr.	%	Fr.	%	Fr.	%	Fr.	%	Fr.	%		
1	All stakeholders have clear understood about the role of 70:30 student's placement policy for the development of science and technology	253	33	353	45.5	53	6.7	56	7.2	50	6.4	2.1	1.3
2	The 70:30 implantation policy have been communicated to all implementers and beneficiary through a clear guide line and policy document of the program	55	7	78	10	122	15.7	359	46.3	161	20.7	3.8	1.4
3	Orientation regarding the 70:30 student's placement have been given to students before they are assigned to their respective stream	22	2.8	81	10.4	62	8	207	26.7	403	52	4.2	1.3
4	The school administration allocate adequate budget to fulfill the required facility of the policy	38	5	85	11	58	7.4	201	26	393	50.7	4.1	1.6
5	Interest, good result, future job opportunity, peer influence and teacher encouragement of students	281	36.2	313	40.3	38	5	92	11.8	51	6.5	2.1	1.2
	GM											3.3	1.3

Key: - 1= strongly agree, **2**= Agree, **3**= Undecided, **4**= Disagree, **5**= strongly disagree

$\bar{X}$= Mean, **S.D** = standard deviation **GM**=grand mean, **F**=frequency, **%** = Percent

As could be seen from Table 4.3 above, respondents response to item number 1 regarding the opinion with the mean scores 2.1 reported that , almost there is no challenges related to the lack of awareness of both implementers and beneficiary of the program about the role of 70:30 student's placement policy for the development of science and technology in our country . In contrary, for the opinion of item 5 with equal mean scores of item 1 (2.1) taking as influential factors , respondents are argued that students interest, good result, future job opportunity, peer influence and teacher encouragement of them are some of the challenges to improve the implementation of the current 70:30 students' steaming policy . On the other hand, regarding the opinion of items 2 ,3 & 4 above with the mean scores of 3.8 ,4.2 & 4.1 respectively (grand mean of 4) deals with some pre tasks of the 70:30 students placement implementation program such as, students level of understanding about the role of 70:30 student's placement policy for the development of science and technology, Orientation regarding the 70:30 student's placement policy have been given to students before they assigned to their respective stream and allocation of adequate budget to fulfill the required facility of the program by the school administrators, the response of majority respondents showed that , un-fulfillment of all mentioned pre tasks have high degree influence on the implementation of the current 70:30 student's placement policy.

4.3.2 Students responses about the availability level of facilities and materials required to run the 70:30 policies properly.

Table 4.5 showed the responses of students about the availability level of facilities and materials required to run the implementation of 70:30 policy properly.

No	Questions/items	Items Value										$\bar{X}$	S.D
		1		2		3		4		5			
	A. Library	Fr.	%	Fr.	%	Fr.	%	Fr.	%	Fr.	%		
1	The availability of relevant reference books and teaching aids	209	27	210	27	102	13	105	13.5	149	19.2	2.3	1.4
2	The availability of sufficient reading rooms with enough furniture and electric systems	295	38	223	29	36	4.5	101	13	120	15.4	2.4	1.5
3	The functionality of the library out of normal class time	214	28	225	29	116	15	108	14	112	14.4	2.6	1.4
	GM											2.4	1.4
	B. Science Laboratory												
1	The availability of lab manual, enough apparatus & chemicals, professional lab technician,	224	29	165	21.2	132	17	115	14.4	139	18	2.7	1.5
2	The availability of preparation room with functional electric, water & heat for different streams	253	33	353	45.5	53	6.7	56	7.2	50	6.4	2.1	1.3
3	The availability of adequate lab equipment's budget	54	7	65	8.3	102	13	415	53.5	439	57	2.3	1.4
	GM											2.3	1.4
	C. Class rooms												
1	The capacity of class room	38	5	85	11	58	7.4	291	38	393	51	4.1	1.6
2	The availability of class rooms with enough furniture, black board and electric systems	55	7	78	10	112	14.4	369	48	161	21	3.7	1.5
	GM											3.9	1.5
	D. Other School Facilities												
1	The availability of plasma, appropriate computer room with enough computers & internet access, comfortable pedagogical centers, comfortable technical drawing rooms	305	39.4	301	39	43	5.5	65	8.3	51	6.5	2.1	1.3
2	The capacity of computer room, pedagogical center and technical drawing rooms	295	38	223	29	36	4.5	101	13	120	15.4	2.4	1.5
	GM											2.2	1.4

Key: - 1= strongly agree, **2**= Agree, **3**= Undecided, **4**= Disagree, **5**= strongly disagree

$\bar{X}$= Mean, **S.D** = standard deviation **GM**=grand mean, **F**=frequency, **%** = Percent

As could be observed, Table 4.5 above gives a comparative picture of respondent's response on the opinion of items 1, 2 &3 with the mean score range from 2.3 to 2.6 and standard deviation ranges from 1.4 to1.5 indicating that, there is a comparable gaps on their schools library organization such as, availability of relevant reference books, teaching aids, sufficient reading rooms with enough furniture & electric systems and the functionality of the library out of normal class time which is supposed to be one of the influential factors for the absence of better result and the declination of the quality of the 70:30 policy. Whereas the mean score 2.7 (with SD=1.5) of item 1 regarding the opinion taking as part of factors related to science laboratories reported that the majority of the respondents (students) have no enough information about whether their science laboratories full of all the required lab materials or not mentioned by item 1.But with the mean score range from 2.1 to 2.3 of items 2 & 3 opinions regarding the functionalities of electric, water & heat systems and adequacy of the budget allocated for lab materials taking as part of factors, the respondents response reported that the other high degree challenges to improve the quality of the 70:30 students placement policy generated from the weakness of the science laboratories organization that meet the requirements of preparatory school practical activities.

Similarly for the opinions of items 1&2 related to others school facilities those required for the effectiveness of 70:30 program with the mean score of 2.1 & 2.4 (GM= 2.2) majority students respondents argued that, still there is a problems existing related to the above mentioned others school facilities those challenged the improvement of quality of the 70:30 students streaming policy in their preparatory schools.

On the other hand, the respondents response for the opinions of items 1&2 with mean score 4.1 and 3.7 (GM = 3.9) regarding the capacity and availability of class rooms with enough furniture, plasma TV, black board and electric systems taking as a factors the respondents opinion created the same picture with opinion of the respondents teacher above and it reported that there is resistance on the implementation of the 70:30 program related to the class rooms organization in selected preparatory schools.

To sum up, as I have seen from my observation and the respondents response through interview, majority of observation related areas of this study have comparatively a high degree of negative impacts on the implementation and running of the current 70:30 student's placement policy.

4.3.3 Students responses about the degree of influence related to conducting practical works for preparatory students on the implementation of newly designed 70:30 student's placement policy.

Table 4.7 showed the responses of students about the degree of influence related to conducting practical works for preparatory students on the implementation of newly designed 70:30 student's placement policy.

No	Questions/items	Items Value										$\bar{X}$	S.D
		1		2		3		4		5			
		Fr.	%	Fr.	%	Fr.	%	Fr.	%	Fr.	%		
1	I attend laboratory demonstrations in the laboratory	27	3.4	55	7	99	13	211	27.2	383	49.4	3.8	1.6
2	I can able to identify some basic laboratory apparatus and equipments	44	5.6	49	6.3	82	10.5	207	27	393	51	3.7	1.4
3	I developed skill, how to carry out laboratory demonstrations	22	2.8	81	10.4	62	8	207	26.7	403	52	4.2	1.3
4	I can able to write laboratory reports	21	2.8	84	10.4	60	8	207	26.7	403	52	4.3	1.3
	GM											4	1.4

Key: - 1= strongly agree, **2**= Agree, **3**= Undecided, **4**= Disagree, **5**= strongly disagree

$\bar{X}$= Mean, **S.D** = standard deviation **GM**=grand mean, **F**=frequency, **%** = Percent

As clearly seen in Table 4.7, the respondents responses on the opinion of the whole items with the mean score range from 3.7 to 4.3 (GM = 4) reported that there is a comparable shortage in the selected schools related to conducting practical work particularly with the opinions of items in table 4.7 above. Thus, the researcher can understood that in addition to the factors addressed by the previous objectives of the study, the other great challenges that faced the effectiveness of the implementation of newly designed 70:30 student's placement policy were generated from absence of conducting practical activities for the 70% of preparatory students through well organized laboratories with professional lab technicians.

4.3.4 Students responses about the other school related problems that challenged the implementation of newly designed 70:30 student's placement policy.

Table 4.9 showed the responses of students about the other school related problems that challenged the implementation of newly designed 70:30 student's placement policy.

No	Questions/items	Items Value										$\bar{X}$	S.D
		1		2		3		4		5			
		Fr.	%	Fr.	%	Fr.	%	Fr.	%	Fr.	%		
1	Attention is given to practical works	53	7	80	10	113	14.4	370	48	159	21	3.6	1.5
2	Tutorial classes are arranged in various subject of your stream	44	5.6	49	6.3	82	10.5	207	27	393	51	3.7	1.4
3	Co-curricular activities are strengthened	253	33	353	45.5	53	6.7	56	7.2	50	6.4	2.1	1.3
4	Recognition and award for innovative students is practiced	295	38	223	29	36	4.5	101	13	120	15.4	2.4	1.2
	GM											3.1	1.3

Key: - 1= strongly agree, **2**= Agree, **3**= Undecided, **4**= Disagree, **5**= strongly disagree

$\bar{X}$= Mean, **S.D**= standard deviation **GM**=grand mean, **F**=frequency, **%** = Percent

As could be seen above, the data in Table 4.9 showed the grim image that the respondents' opinion about the other school related problems through opinions of items 1 & 2 with the mean score of 3.6 & 4.1 (with Gm= 3.8) taking as part of the factors the respondents argued that there is a high degree of impacts on the implementation of the implementation of 70:30 student's placement policy due to shortages of attention given to practical works and delivery of tutorial classes in various subjects. On the other hand, the respondents opinion for the issues under items 3 & 4 in table 4.9 above with mean scores of 2.1 & 2.4 (Gm=2.3) indicated that there is a better experience regarding the commitment to strengthened Co-curricular activities and providing award for the competent and innovative students.

In addition the result from the open-ended questions (interview) teachers regarding the achievement of their school in terms of production, utilization and dissemination of the 70:30 student's placement policy through conducting more of practical works for educational quality reported that, They have not seen any achievement regarding the issue in their school because of different constraints

mentioned under the research questions of this study. More over that, no one focuses on it and there was no a proper follow-up due to lack of responsibility, commitment and interest among implementers of the program to implement it as planned. Not only these, but also there were no one who was well trained and skilful enabled creating awareness about the role of 70:30 students placement policy practically for quality of education interims of being innovative teachers and creating students as such .

The findings of the interview from teachers showed that, the implementation of the 70:30 students placement policy for the achievement of quality education in general and development of science & technology in particular was found at a very low stage. Therefore to improved the quality of education and science & technology through the implementation of the 70:30 students placement policy there must be an integrated effort from all stakeholders of education.

4.5 The findings from both non participant observation and Interviews regarding the issues required direct observation under this study.

Table 4.10.showed that, the observation format and basic questions rose through it during the researcher observation and answers in the form of Yes or No.

	Issues Related to School Laboratory	Yes	No
	Are there enough laboratory classrooms and equipments in the school?		✓
	Are there the laboratory equipments meet the needs and able to improve the quality of the 70; 30 program as planed before?		✓
	Are there qualified laboratory technicians who can set up all lab equipments to conduct all practical works for science students in the school?		✓
	All class students have a chance to get practical laboratory practice in the school laboratory?		✓
	Are there different laboratory rooms for different science streams (physics, Biology and Chemistry)	✓	
	Issues related to school Library		
	Are there library rooms' size is sufficient for the school students?	✓	
2	Is there well organized library in the school?		✓
	The level library organization in all respects able to achieve the aim of the 70; 30 policy as planed before?	✓	
	Issues related to School Class room		
	Is there enough set up and well cleaned class rooms in the school?	✓	
	Is there plasma TV found in each class rooms?	✓	
	The plasma TV found in each class rooms properly functional?		✓
	Issues related to School ICT Center	✓	
	Are there sufficient ICT teachers in the school?		
	Is there well organized ICT in all respects in the school that can meet needs of 70; 30 programs as planed before?		✓
	Is there an internet access that able to handle all of the students?		✓

As could be seen from table 4.10 above, during my observation I have seen a number of constraints which have a negative impact to improve the implementation of the 70; 30 student's placement policy effectively in selected governmental preparatory schools. The findings from Observation and Interviews reported that, there were no problems related to class room organizations but there are

lacks of not only professional lab technician but also well organized laboratories in all aspects that meet the objectives of the 70:30 implementation policies. Regarding school libraries the integrated findings as mentioned above argued that, Even though, there were better library with their own level of organization, as I have seen from my observation ,there was inadequacy facilities in terms of achieved the aim of the 70:30 students placement policy as expected.. Also, the sizes of school libraries were not proportional with the number of students. Similarly, the schools' ICT center not organized with sufficient computers and internet access and white board to handle the school communities properly. As a professional the lab technicians and librarians can provide a more detail information to identify issues concerning laboratories and libraries as they spend much of their time there. Accordingly, about 80% of the findings obtained from lab technicians of the selected sample school through interview reported that there were scarcities in their schools' laboratories such as enough apparatuses, chemicals, adequate budget and different laboratory rooms for different field of studies to carry out different scientific experiments which are the back bone the newly designed 70:30 educational policy. Generally, from the responses of the lab technicians illustrated above, on average there is problems of well organized laboratories in the selected sample schools which negatively influences the effort taken to make the 70:30 student's streaming policy fruit full as expected. Concerning libraries the findings from the discussion of librarians related to level of libraries organization in their school through opinions of interview items reported that, regarding the availability of relevant reference books and sufficient reading rooms with enough furniture, almost all (80%) of the librarians respondents argued that there is no challenges that faced them in terms of shortage of the above mentioned facilities those required by the students who frequently attained our libraries services enough there is unbalance between the total number our school students . From this findings the researcher might understood that the following basic points, Firstly though currently there is no problem of library facilities that can accommodate only for students those clients of library, the opinions of the librarians implies that still there is a problems that may face them if all the school students wants to use it . Secondly, as could be heard from the opinions of the librarians from the student's side also, there is no culture of studying and spending time in their school library.

4.6 Findings responses of School Guidance & Counselors

It is clear that as a professional the school Guidance & Counselors can play a high degree of role to gather information and identify student's problem that affect their academic achievement which may in school or out of school problems by making close and open approach with students using their professional treatment. Not only this, the other basic function and responsibility of school guidance &counselors is after they identified the basic students' problems that would be caused to reduce their academic result, they will give proper advice students about how they resist and solve the existing problems as well how they protect themselves from other problems. in addition they also set up and indicate the possible solutions for parents and teachers about how they treat and support these students to improve their achievement.

The finding reported that from the discussion of school guidance & counselors of sample schools through interview, their general perception about their role to improve the quality of education by advising and inspiring students to improve their achievement even through challenges by indicating possible solutions using their profession to raising school achievement in general and students academic achievement in particular in the selected school could be stated as follows :-

The findings result showed that, all the guidance and counselor respondents have common agreement regarding their role to improve students' academic achievement and education quality in general. Hence the majority of guidance and counselor respondents were tried their all the bests to make success full the quality of education through improving students academic achievement. But as they said that there was a problem beyond their potential that challenges both students and teachers to achieve the objectives of quality education in their school level.

According to the school Guidance & Counselors respondents' response, the basic psychological problems generated from school related or out of school environments that faced preparatory school students' academic improvement are:- Unfriendly (hostile) school environment, Unhealthy peer relationships or influence which is exposed them to practice bad behaviors and drugs so they spent much of their time for it, Different family back ground even though there is uniform for each school students compute with different wearing style specially shoos and electronics materials like mobiles and computers, Variation of approach and support done by teachers for different students also the other cause of students' psychological problems, Stressful life events related to their families, Age

influence which is lead students to opposite sex influence and interest and Parents' socio-economic and educational background also has high degree impact on students' academic achievement.

As school guidance and councilors after mentioned the above problems as the basic factors that make difference among students academic achievement, they recommended the following possible solutions for all educational stakeholders including their staff professionals as follows:

Students' family should develop open, friendly and active communication with their children's in all aspects of life specially regarding their academic progress through collaboration and discussion with teachers and school principals, As much as possible all teachers should give fair and equal approach as well support for all students and also share their experience about how they protect themselves from bad things and better studying mechanisms, The school principal should try to use, their maximum potentials to make conducive teaching learning activities in all aspects, give active response any school capacity builders program which is designed by any teachers, The school principals and other educational stakeholders prepare high degree motivational incentive for teachers and students who scored a better achievement, The school guidance and councilors should try their all the bests to advice students through different mechanisms using their profession and prepare a short term training program for all students collaborating with school principals and sub-city education office.

4.7 Findings from the overall responses of school principals about the factors that influencing the implementation of newly designed 70:30 students' placement policy

It is clear that the school management who have a good quality in educational leadership and committed for his/her duty and responsibility play the first role to change both the image of school development and academic achievement in general and to meet the aim of the educational in particular. This implies that the degree of factors that resist implementation of newly designed 70:30 student's placement policy with good students result highly depend upon quality of school management.

The finding from the discussion with school principals of sample schools through interview reported that, their general perception about their role to improve the quality of education, to overcome challenges and facilitating prospects in which they play a great role to raise school achievement in

general and particularly to improve the quality of the current implementation of 70:30 student's placement policy in the selected sample preparatory schools could be stated as follows:-

Based on the findings, all the principal respondents have a positive agreement regarding the role of school management to improve the performance students' achievement and quality of education in general. However, the majority of principal respondents were not tried all their bests to bring success in the quality of education through improving students academic achievement to meet the objective of the 70:30 education policy. Thus, they were not get satisfaction as they expected because of different reasons listed below. As they said, there are a number of challenges that faced not only school principals but also the education sectors as a whole to achieve the objective as planned. According to the respondents' response towards the raised issues by the researcher through interview, the basic challenges that faced quality of education in general through the implementation of newly designed 70:30 student's placement policy were:-

A problems of selection of new trainer (comer) from the begging who joined teaching professional i.e., the new comer teachers who join university and teachers collage to train this profession and being well qualified teachers should be select (promote) based on their high score on iterance exam related to the profession and their interest as well commitments to the teaching profession, A problem of teaching and evaluation methodology i.e. the new qualified teachers should be train in depth about the teaching and evaluation methodology not only about the subject matter, A problem of interest and commitment of most teachers to give full time for their profession. As the respondents mentioned ,the origin of this problem is dissatisfaction of teachers in their incentives i.e. the incentive (salary) is not enough to withstand the life costs and this condition divert most teachers to train and join other profession. Now a day it is clear that most teachers are found in training in different profession by their own selves through extension program at different universities and colleges to turnover from teaching profession and get a better salary by joining their new profession. Since they need a time to accomplish their new profession tasks, teachers were subjected to spend much of their time to accomplish different activities of their new professional training instead of spending their time for their normal teaching learning activities properly. It is clear that one can imagine the degree of impact of this condition on students' academic achievement and quality of education in general and especially process of improving the implementation of newly designed 70:30 student's placement policy.

The principals' response also, indicates that as a result of inadequacy of the school annual budget, there were problems of well organized laboratory and ICT center, Carrying out a short term training program for teachers about teaching methodology and school related activities, Designing tutorial classes by paying additional incentives for the teachers, The principals response also, indicate that as a result of inadequacy of the school annual budget, there were problems of

The principals also argued that there is problem related to students' interest and commitment towards the implementation of 70:30 students' placement policy, as they forced to join the science stream irrespective of their interest and result. Moreover, the principals mentioned that there was lack of parents' interest to be active participant in different school related conferences prepared by school community.

On the other hand, regarding their commitment in producing motivational mechanism and strategy to reinforce best teachers as well competent students, to disseminate best practice of these model teachers and students and also their speed and scope to solve and correct the school society complains within the existed condition, almost all principal respondents reflected that, even though they have a less difference from school to school they committed and have full interest to give motivational praise and recognition certificates for teachers and students who are best model for the rest in school level. Regarding giving active response and taking corrective action for the complains raised by school teachers and students almost all principal respondents were committed to solve the complains as soon as possible.

The overall finding from the principal responses reported that students academic achievement and hence the implementation of 70:30 student's placement policy were influenced with a number of factors and this indicated that there is no conducive environment (prospect) which enables to improve students' academic achievement and to bring into existence the implementation and running of the 70:30 students streaming practices better. Therefore, the researcher might conclude that, even though all the principals were agreed on the positive impact of students academic performance for the quality of education and for implementation of newly designed 70:30 student's placement policy, they couldn't attain the expected result in their schools because of the above listed constraints and luck of their commitment to use the existing potential of the school.

In general based on the overall findings get through interview discussions with guidance &counselors and the principals preparatory schools, the researcher believe that, if at least half of the constraints mentioned above will solve using integrated remedial action with different educational stakeholders, it enables to improve education quality in general and implementation level of the 70:30 students placement policy through a better academic achievement of preparatory students.

Chapter Five

Summary, Conclusions and Recommendations

5.1 Summary

The primary purpose of this study was to explore the factors that influencing the implementation of newly designed 70:30 student's placement policy in some selected governmental preparatory schools of Addis Ababa City. To accomplish this purpose, the study has attempted to enlighten the issues, prospects and challenges of the school environment with the intention of recommending possible solutions which would help to sustain best practices and ameliorate the challenges.

In order to find out answers to the basic questions of this study and provide substantive solutions of the existing problems, a variety of data gathering instruments, such as, questionnaire, interviews and direct observation were employed. Interviews were held with ten school Principals, fifteen Lab-technicians and five Librarians. To this effect, both quantitative and qualitative approaches were used for data collection and data analysis. Before beginning the actual data collection from teachers, the questionnaire was piloted with two directors, three Lab- technicians, one librarian, twenty students and ten teachers of preparatory schools in selected sub cities of Addis Ababa City.

The analysis of numerical data, descriptive statistics (mean, standard deviation and percentage and Grand mean) score were computed. Based on the results of quantitative and qualitative data analysis, the major findings of this study were summarized as follows:

1. The majority of respondents out of the total participants of this study including school administrators regarding to what extent does the fulfillment of necessary preconditions influence the implementation of newly designed 70:30 student's placement policy shown their overall opinion as follows:- On average above 65% of respondents argued that, the level of students understanding about the role 70:30 policy for the development of science and technology is one of the influential factors. Nearly 62% of respondents reported that, the amount of budget that allocated for preparatory schools level cannot able to fulfill all requirements that meet the aim of 70:30 students' placement policy in all aspects. Around 80% of principal respondents argued that, problems of interest and commitment of most teachers to give full time for their profession. According to the response of majority (78%)

principals arguments, a problem of teaching and evaluation methodology few teachers also is the other challenge i.e. the new qualified teachers should be train in depth about the teaching and evaluation methodology not only about the subject matter. More than 76% of respondent's response showed that, a problem related to students' interest and commitment towards the 70:30 policies, as they forced to join the science stream irrespective of their interest and result is one of the severe factors. Moreover, the principals mentioned that there was lack of parents' interest to be active participant in different school related conferences prepared by school community

On the other hand the findings from most of school Guidance & Counselors respondents, reflected that some psychological problems generated from school related or out of school environments that faced preparatory school students' academic achievements for the improvement of 70:30 students' placement policy are (1) unfriendly (hostile) school environment ,(2) unhealthy peer relationships or influence which is exposed them to practice bad behaviors and drugs so they spent much of their time for it, (3) different family back ground even though there is uniform for each school students compute with different electronics materials like mobiles and computers, (4) variation of approach and support done by teachers for different students,(5)stressful life events related to their families and (6)parents' socio-economic and educational background also has high degree impact on students' academic achievement.

2. The study revealed regarding what degree does the facilities and materials required for running the 70:30 students placement policy are available in the targeted schools, shown their overall opinions of the majority respondents out of the total participants of this study including school administrators were: About 90% of the respondent's response showed that, the absence of well organized science laboratories, libraries and ICT centers that accounts the special requirements of the 70:30 education policy in which great attention is given to science and technology is the crucial factor. Also, lack of attention given by school principals about the necessity of practical work for preparatory students and its impact on the result and quality of the 70:30 students' placement policy.

At the same time the findings from qualitative analysis (interviews & observation) related to the above issue also assured that there is problems of appropriate computer room with enough

computers & internet access, comfortable pedagogical centers, technical drawing rooms, preparation room with functional electric, water & heat for different streams and lab manual, enough apparatus & chemicals, professional lab technician, due to in adequacy budget allocated by the school administrators. In addition regarding this issue responses of school principals indicate that as a result of inadequacy of the school annual budget, there were problems of Carrying out a short term training program for teachers about teaching methodology and school related activities, designing tutorial classes by paying additional incentives for the teachers

3. The general image of this study regarding to what extent does conducting practical works for students influence the implementation of newly designed 70:30 student's placement policy, the findings from the opinions of the majority (above 82%) respondents the researcher could be stated the following main points :- Most practical activities those required for science students were not conducted properly. As a result, most of preparatory science students have no enough knowledge and skill about basic laboratory apparatus and equipments, how to carry out laboratory demonstrations and how to write laboratory reports, At least using the existed condition, almost in all of the sample school there is no qualified and committed lab technician who operate the science laboratory that able to make students active practitioners and innovative.

   As intuitively one can expects, as there is no science without practical works (experiments) it could be understood about the direct relation of level of practical works that conducted for preparatory students to achieve the aim of the implementation of newly designed 70:30 student's placement policy for the development science and technology. Thus the researcher may conclude the improvement process of the currently implemented 70:30 students' placement policy highly negatively influenced by the factors those related to practical works of preparatory students.

4. The study report about what are other school related problems those challenged the implementation of the current 70:30 students steaming program, the findings regarding the issue from the response of the majority (77 %) respondents of this study, the researcher could be draw the following points of summary:-There is no challenges faced the implementation of newly designed 70:30 student's placement policy related to teaching load, competency and

commitments of teachers to run the program well. But there is a comparable resistance of implementation of newly designed 70:30 student's placement policy related to principals commitments in terms of giving attention first for teaching learning process rather than spending their times to other routine tasks, Student's interest and low degree of commitments to do all of their tasks also have its own challenges to improve the newly designed 70:30 preparatory schools education policy by reducing the active student's involvement in practical and conceptual practices of science itself.

5.2. Conclusions

The main Objective of the study was to assess the nature and degree of factors that influencing the implementation of the current 70:30 students' streaming program in some selected governmental preparatory schools of Addis Ababa City and suggests strategies they may help to improve preparatory school students academic achievement and ultimately to achieved the aim of the implementation of newly designed 70:30 student's placement policy for the development of science and technology in our country. On the basis of the overall findings of the study the researcher could be drawn the conclusions as follows:-

There are no significant challenges that faced the implementation of the current implementation of newly designed 70:30 student's placement policy related to awareness gap for both implementers and beneficiary through a clear guide line and policy document of the program about its role for the development science and technology, The implementation of newly designed 70:30 student's placement policy was not challenged by the factors those related to school class room organization and teachers competency. According to the majority of the respondents of this study, some of the basic factors that challenge the implementation of newly designed 70:30 student's placement policy were highly generated from the weakness of sample schools to support and strengthened the program with more of practical works of students by installing different supporting mechanisms, Based on the findings most (80%) of the preparatory schools were not well organized in terms of comfortable science laboratories, libraries, ICT center with internet access and pedagogical &drawing rooms. The other basic challenges is inadequacy of preparatory schools annual budget to fulfill all of the requirements of the implementation of newly designed 70:30 student's placement policy in all aspects and to design regular tutorials class for students through additional incentives of teachers. According to the reports of this study, most of preparatory students were forced to join science steam without

their choice. Thus, the result and quality of the implementation of newly designed 70:30 student's placement policy was highly challenged by the factors related to students' interest and commitments to study hard and competent for their better academic performance in science subjects including mathematics, The lack of attention and commitments of preparatory schools principal in terms of paying much of their time through supporting and making conducive teaching learning environments instead of spending their time for routine activities also resist the implementation of newly designed 70:30 student's placement policy.

5.3. Recommendations

Based on the research findings and conclusions drawn above, the following recommendations have been forwarded to educational authorities and other concerned stakeholders who responsible to improve the implementation of the current implementation of newly designed 70:30 students' placement policy should take into accounts the following points.

1. The all of the preparatory schools principals and other responsible stakeholders should give a great attention to reorganize all of the science laboratory ,library and ICT center with necessarily apparatus, chemicals and reference books and other setups those able to improve the 70:30 students' streaming policy better.
2. Even though currently the number of interested students to ward science stream is not balanced to run the designed program, instead of enforcing students without their interest, it is better creating awareness and motivation by all concerned bodies about the aims and outcomes of the implementation of newly designed 70:30 student's placement policy for the students.
3. As it is investigated through current study that the students lack the culture of studying hard at their schools libraries, the principals and teachers had better to encourage students to develop habit of spending their time at libraries.
4. All the concerned bodies of education sectors including minster of education try their all of the bests to give a great attention and respects for teaching profession to abet high degree of teachers' turnover.
5. The selection of new professionals who join the teaching profession should be done on the basis of their score on the entrance exam and interest towards teaching profession.

6. All teachers should try their maximum potential to share knowledge by concerning first for generation within the existing conditions.
7. The school principals should support the guidance &counselors in all respects to prepare short term training for students about how they improve their academic achievement by resisting the peer influence and protect themselves from bad things which are diverted them out of truck.
8. It is better the school principals and others any supportive bodies are give a great attention first for teaching learning process and improve the student's academic performance to achieve the aim of implementation of newly designed 70:30 student's placement policy.

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Appendices

Appendix A

Addis Ababa University

School of Graduate Studies

Institute of Educational Planning and Management

An Assessment of Factors Influencing the implementation of the 70:30 students' placement policy in some selected government preparatory schools in Addis Ababa City Administration **Questionnaire for preparatory schools Teachers**

Dear respondents,

You are chosen to fill in this questionnaire because you are preparatory schools teachers in Addis Ababa Government Preparatory Schools. The purpose of this questionnaire is to collect relevant information from some selected preparatory school teachers to investigate the factors that influenced the implementation of the 70:30 students placement policy in some selected government preparatory schools in Addis Ababa City Administration. For this reason, your cooperation in completing this questionnaire valuable for the study. Since your response will be kept confidentially, please feel to answer all questions as genuinely as much as possible.

Dawit Kebede

Phone: - --------

E-mail :- ---------

Thank you in advance for your cooperation!

Direction: a. No need of writing your name.

b. Please try to answer every question in accordance with the instruction provided.

Part I: General Information

Sex ---------- Age ---------

Your educational background (Qualification) --------- ----------

Name of your school ----------

Number of periods you are teaching ----------

Your years of service in teaching ----------

rt II

struction:

ıe following statements are designed to assess your overall opinions regarding the challenges and ospects that influenced the implementation of the 70:30 students' placement policy in your school. ease read the following items carefully and indicate your level of agreement by putting a tick mark ′) across each statement. Please note that, **1= strongly agree, 2= Agree, 3= Undecided, 4= isagree, 5= strongly disagree**

Items	Rank of respondents opinion				
	1	2	3	4	5
The degree of fulfillment of necessary preconditions influence the implementation of the current 70:30 students' placement Policy					
The implementers and beneficiary clearly have understood about the role of 70:30 student's placement for the development of science and technology					
The 70:30 implantation practice have been communicated to all implementers and beneficiary through a clear guide line and policy document of the program					
Orientation regarding the 70:30 student's placement have been given to students before they are assigned to their respective stream					
The school administration allocate adequate budget to fulfill the required facility of the program					
Interest, good result, future job opportunity, peer influence and teacher encouragement of students					

The facilities and materials required for running the 70:30 students' placement policies are available in your schools					
A. Library					
The availability of relevant reference books, teaching aids					
The availability of sufficient reading rooms with enough furniture and electric systems					
The functionality the library out of normal class time					
B. Science Laboratory					
The availability of lab manual, enough apparatus & chemicals, professional lab technician,					
The availability of preparation room with functional electric, water & heat for different streams					
The availability of adequate lab equipment's budget					
C. Class rooms					
The capacity of class room					
The availability of class rooms with enough furniture, plasma TV,black board and electric systems					
D. Other School Facilities					
The availability of appropriate computer room with enough computers & internet access, comfortable pedagogical centers, comfortable technical drawing rooms					
The capacity of computer room, pedagogical center and technical drawing rooms					
The degree conducting practical works that influence students for the improvement of newly designed 70:30 students' placement policy					
Students attend laboratory demonstrations in the lab					
Students are able to identify some basic apparatus and equipments					
Students have developed skill to carry out laboratory demonstrations					
Students have developed skill of writing laboratory reports					
Other schools related problems those challenged the implementation of the current 70:30 students steaming policy					
Some students are forced to join in natural science					

stream without their choice					
There are inadequate teachers in your school for each subjects					
Weekly load for science teachers is too large to engage in other supportive activities					
School teachers are not committed in implementing the practice					
The school administrator's lack of commitments to implement the practice					

Part III

Please, feel free to add below any comment or views what you think that have not been covered in this questionnaire concerning the contribution of the induction for quality of education

1. What are the achievement of your school if any, in terms of production, utilization and dissemination of implementation of the 70:30 students' placement policy in some selected government preparatory schools in Addis Ababa City Administration for educational quality and developing science &technology? ---------- ----------

---------- ----------

2. What are the challenges that hinder teachers' involve in improvement process of the 70:30 students streaming program (activities) in your school? ----------

---------- ----------

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3. What do you suggest to overcome these challenges at preparatory school level? ---------- -----

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---------- ---------- To

strengthen the newly designed 70:30 students streaming program for quality of the education in general and science &technology in particular, what do you think would be the role of principals, (supervisors, coordinators, Teachers Association, Parent Teacher Association) Addis Ababa city preparatory schools? -------- ----------

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5. What measures need to be taken to get involved more teachers in the improvement process of the 70:30 students streaming policy? ---

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Appendix B

Addis Ababa University

School of Graduate Studies

Institute of Educational Planning and Management

An Assessment of Factors Influencing the Implementation of the 70:30 Students Placement Policy in Some selected Government Preparatory Schools in Addis Ababa City Administration

2. Questionnaire for Students

Dear respondents,

The purpose of this questionnaire is to collect relevant information from some selected preparatory school students to investigate the factors that influenced the implementation of the 70:30 students' placement policy in some selected government preparatory schools in Addis Ababa City Administration. For this reason, your cooperation in completing this questionnaire valuable for the study. Since your response will be kept confidentially, please feel to answer all questions as genuinely as much as possible.

- **No need of writing your name.**

Dawit Kebede

Phone: - ------

E-mail :- -----

Thank you in advance for your cooperation!

I. **Background Information**

Instruction: - Some characteristics of students are given below.
Please respond either by filling in the blank space or by circling the letter of the appropriate response.

1. Name of school .....
2. Grade.....
3. Sex a. Male b. Female
4. Age a. 15-18 years b. 19-120 years c. 21-23 years' d. Above 23 years
5. The result you achieved in grade 10 EGLSE is ..... Point

II. **Items related to yourself and your parents**

1. With whom are you living now?
   a/ with my mother and father b/ with my mother c/ with my father
   d/ with my mother and step father e/ with my step mother and father f/ with relatives

2. Which of the following is true about your mother and your father?

a/ they live together b/they are divorced c/ my mother has died

d/ my father has died e/ my mother and father have died

3. How much tuition fee do your parents pay to your school per year?

a/ less than Birr 50 b/ greater than Birr 50 and less than Birr 150

c/ greater than Birr 150 and less than Birr 300 d/ greater than Birr 300

4. How many hours do you study per week?

a/ more than 5 hours per week b/ 5 hours c/ 4 hours

d/ 3 hours e/ 2 hours f/ I do not have time to study

III. **Items related to Factors influencing the implementation of the current 70:30 students streaming practice**

Direction:- The following items indicate factors that contribute to the Implementation of the 70:30 Students Placement Policy in Some selected Government Preparatory Schools in Addis Ababa City Administration . Each item is to be responded by selecting the most appropriate response from the five alternatives where

1= strongly agree, 2= Agree, 3= Undecided, 4= Disagree, 5= strongly disagree

Please respond by marking a tick "√" against the response you think most appropriate.

Items	Rank of respondents opinion				
	1	2	3	4	5
The degree of fulfillment of necessary preconditions influence the implementation of the current 70:30 students' placement Policy					
The implementers and beneficiary clearly have understood about the role of 70:30 student's placement for the development of science and technology					
The 70:30 implantation practice have been communicated to all implementers and beneficiary through a clear guide line and policy document of the program					
Orientation regarding the 70:30 student's placement have been given to students before they are assigned to their respective stream					
The school administration allocate adequate budget to fulfill the required facility of the program					
Interest, good result, future job opportunity, peer influence and teacher encouragement of students					
The facilities and materials required for running the 70:30 students' placement policies are available in your schools					
A. Library					
The availability of relevant reference books, teaching aids					
The availability of sufficient reading rooms with enough furniture and electric systems`					
The functionality the library out of normal class time					
B. Science Laboratory					
The availability of lab manual, enough apparatus & chemicals, professional lab technician,					
The availability of preparation room with functional					

electric, water & heat for different streams					
The availability of adequate lab equipment's budget					
C. Class rooms					
The capacity of class room					
The availability of class rooms with enough furniture, plasma TV, black board and electric systems					
D. Other School Facilities and materials available in your schools					
The availability of appropriate computer room with enough computers & internet access, comfortable pedagogical centers, comfortable technical drawing rooms					
The capacity of computer room, pedagogical center and technical drawing rooms					
The degree conducting practical works that influence students for the improvement of newly designed 70:30 students' placement policy					
I attend laboratory demonstrations in the laboratory					
I can able to identify some basic laboratory apparatus and equipments					
I developed skill, how to carry out laboratory demonstrations					
I can able to write laboratory reports					
Other schools related problems those challenged the implementation of the current 70:30 students steaming policy					
Some students are forced to join in natural science stream without their choice					
Attention is given to practical works					
Tutorial classes are arranged in various subject of your stream					
Co-curricular activities are strengthened					
Recognition and award for innovative students is practiced					

Appendix C

Addis Ababa University

School of Graduate Studies

Institute of Educational Planning and Management

An Assessment of Factors Influencing the Implementation of the 70:30 Students Placement Policy in Some selected Government Preparatory Schools in Addis Ababa City Administration

3. An interview guide for School Administration

Questions

1. Are there enough laboratory materials and equipment for each science department? If yes, what is your opinion on the quality and adequacy of the materials and the equipment? If No How you could be achieved the aim of newly designed 70:30 students streaming policy without more of conducting practical works (experiments) for most of your science students?
2. Are there enough and well organized libraries that can handle all students of your school?
3. What do you think about the degree of involvement and influence of student parents to improve their children's academic achievements at preparatory school level?
4. Can you tell me about the effort your school is making to improve students' academic achievement by mobilizing all community of your school and students parent?
5. What efforts are made by the school management to enhance overall quality of 70:30 education policies through a better academic achievement of your school students?
6. On what speed and scope the school management solves and corrects students and teachers Complaints?
7. What motivation mechanisms the school administrations use to enhance teachers teaching and students academic Competency?
8. Does your school have motivational strategy to remunerate best teacher teaching methodology and disseminate best practices and improvement the result of the current 70:30 Students Placement policy? If any, please mention

Appendix D

Addis Ababa University

School of Graduate Studies

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An Assessment of Factors Influencing the Implementation of the 70:30 Students Placement Policy in Some selected Government Preparatory Schools in Addis Ababa City Administration **4. An interview guide for Guidance and councilors of students.**

Questions

1. As school Guidance & councilors what do think about students' psychological problems that affect their academic performance? Is it generated from your school environment or out of school environment? If any other mentions it.
2. As Guidance & councilors you have a better opportunity to deal with students about different factors that affect their academic achievement. So what mechanisms should be administered by teachers and school administrators to solve students' school related problems?
3. At what degree students back ground in different aspect would affect their academic performance?
4. What you recommend regarding students parent role to improve their children's academic performance by making close and open relation with their children's to deal about all problems and set up appropriate solutions?
5. As school Guidance & councilors, what mechanisms you employed to solve students' psychological problems as soon as possible? What about students stability and academic result after you steed such solutions?
6. Can you tell me about your effort to improve the result and quality of the current 70:30 Students Placement Policy through advising and preparing short term training for all preparatory students regarding how to they solve and resist different problems that affect their academic performance?

Appendix E

Addis Ababa University

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Institute of Educational Planning and Management

An Assessment of Factors Influencing the Implementation of the 70:30 Students Placement Policy in Some selected Government Preparatory Schools in Addis Ababa City Administration

5. An interview guide for school Librarians.

Questions

1. As school librarian what do think about level of your school library organization interns of reference books, shale's, furniture, and electric and ventilation system?
2. Do you think that the facilities in the library are proportional to the total number of your school students?
3. Based on your observation can you say that there is a good habit of studying and spending time in library with students in your school?
4. Have you ever seen students encouraged by school principals and teachers to use library?
5. Do you believed that the library budget that allocated by school administration able to fulfill all of the requirements?
6. From your experience in your school as librarian what are the basic challenges that faced to operate the library service well? What can you suggest as solutions?

Appendix F

Addis Ababa University

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An Assessment of Factors Influencing the Implementation of the 70:30 Students Placement Policy in Some selected Government Preparatory Schools in Addis Ababa City Administration **6. An interview guide for school Lab-Technicians.**

Questions

1. As school lab-technician what do think about level of your school science laboratories organization interns of Apparatus, necessary chemicals, furniture, Kitts, electric, water and heat system?
2. Do you think that the facilities in the laboratory are proportional to the total number of your school students?
3. Based on your observation can you say that there is a good habit of attending and actively participating in different practical works during lab class with students in your school?
4. Do you believed that the laboratory budget that allocated by school administration able to fulfill all of the requirements?
5. From your experience in your school as lab-technician what are the basic challenges that faced to operate the laboratory service well? What can you suggest as solutions?

Appendix G
Addis Ababa University
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An Assessment of Factors Influencing the Implementation of the 70:30 Students Placement Policy in Some selected Government Preparatory Schools in Addis Ababa City Administration

Observation Checklist

Part I: General information
1.1 Date observation----------
1.2 Name of school ----------
1.3 Time of observation----------
Part II. Basic question rose during observation and answers in the form of yes or no

o.		Yes	No
	Issue related to School Laboratory		
1	Are there enough laboratory classrooms and equipments in the school?		
2	Are there the laboratory equipments meet the needs and able to improve the quality of the 70; 30 students placement policy as planed before?		
3	Are there qualified laboratory technicians who can set up all lab equipments to conduct all practical works for science students in the school?		
4	All class students have a chance to get practical laboratory practice in the school laboratory?		
5	Are there different laboratory rooms for different science streams (physics, Biology and Chemistry)		
	Issues related to school Library		
1	Are there library rooms' size is sufficient for the school students?		
.2	Is there well organized library in the school?		
.3	The level library organization in all respects able to achieve the aim of the 70; 30 policy as planed before?		
	Issues related to School Class room		
.1	Is there enough set up and well cleaned class rooms in the school?		
.2	Is there plasma TV found in each class rooms?		
.3	The plasma TV found in each class rooms properly functional?		
	Issues related to School ICT Center		
.1	Are there sufficient ICT teachers in the school?		
.2	Is there well organized ICT in all respects in the school that can meet needs of 70; 30 policies as planed before?		
.3	Is there an internet access that able to handle all of the students?		