THE PRACTICES OF CLUSTER PRIMARY SCHOOLS IN IMPLEMENTING CRC INNOVATIONS IN ADDIS ABABA CITY ADMINISTRATION

BY

ASSEGA LEMMA ODA

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

JULY 2007

ADDIS ABABA

THE PRACTICES OF CLUSTER PRIMARY SCHOOLS IN IMPLEMENTING CRC INNOVATIONS IN ADDIS ABABA CITY ADMINISTRATION

BY

ASSEGA LEMMA ODA

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

JULY 2007

ADDIS ABABA

THE PRACTICES OF CLUSTER PRIMARY SCHOOLS IN IMPLEMENTING CRC INNOVATIONS IN ADDIS ABABA CITY ADMINISTRATION

BY

ASSEGA LEMMA ODA

A Thesis Submitted to the School of Graduate Studies of Addis Ababa University in Partial Fulfillment of the Requirements of Degree of Master of Arts in Curriculum and Instruction

JULY 2007
ADDIS ABABA

Addis Ababa University

School Of Graduate Studies

College Of Education

Department of Curriculum and Teachers' Professional Studies

The Practices of Cluster Primary Schools in Implementing CRC Innovations in Addis Ababa City Administration

BY

Assega Lemma

Approved by Board of Examination

Abdulaziz Hussien Chairman, Department Graduate Committee	22-8-07 Date	 Signature
Wonbe Kassaye (Dr.) Advisor	14/08/07 Date	 Signature
Feiss Omar (PhD) External Examiner	Aug 16, 2007 Date	 Signature
Abdulaziz Hussien Internal Examiner	14.8.07 Date	 Signature

ADDIS ABABA UNIVERSITY COLLEGE OF EDUCATION
DEPARTMENT OF TEACHER EDUCATION & CURRICULUM STUDIES

Acknowledgements

I would like to express my heartfelt gratitude to my advisor, Dr. Woube Kassaye, for his proficient, unreserved guidance and constructive advice throughout the entire course of this study.

I also want to thank the graduate studies of AAU for the financial support of the study.

I wish also to express my appreciation to the principals, vice-principals and teachers of Birhanih Zare, Abyot Primary, Leake Adgeh and Temenja Yazi cluster school resource centers and satellite schools for their assistance in helping me to gather the required data.

Above all my deepest appreciation goes to my wife W/ro Bayoush Ayalew and my daughters Hilina and Dagmawit for their unreserved encouragement throughout my graduate study.

Table of Contents

List of Tables

List of Figures

List of Appendices

Acronyms

AACAEB =	Addis Ababa City Administration Education Bureau
AED =	Academic for Educational Development
BESO I =	Basic Education System Overhaul I
BESO II =	Basic Education Strategic Objective II
CPD =	Continuous Professional Development
CRC =	Cluster Schools Resource Center
ESDP =	Education Sector Development Programme
ETP =	Education and Training Policy
KCTE =	Kotebe College of Teacher Education
MOE =	Ministry of Education
PDS =	Professional Development Schools
PTA =	Parent Teacher Association
SDF =	Staff Development Facilitator
SNNPR =	Southern Nations Nationalities and Peoples Region
TEI =	Teacher Education Institution
USAID =	United States for International Development

Abstract

The purpose of this study is to investigate the practice of AED/BESO support cluster school's in attaining the innovation of CRC in Addis Ababa. The practice of cluster schools which mainly involve in-service teachers' professional development, practice of cluster schools as a center of excellence and teachers practice in implementing the innovation is given attention in the study.

The study encompasses four sub-cities in Addis Ababa in which four cluster resource centers and twelve satellite schools were made part of the discussion in the report. The approach used to study the problem is mixed method with knowledge claims of pragmatic assumptions, where as the design used in the report is sequential exploratory which is one of the strategies of mixed method.

In phase one of the analysis; qualitative data collection and analysis, where as in phase two, quantitative data collection and analysis was presented. Finally the entire data is mixed and integrated in the study for analysis and interpretation.

The study in its findings reflect that the innovation in most of the cluster schools was successful in attaining active learning, continuous assessment, female student participation, improving dropout rates, and pass rates in the teaching learning process. On the other hand, lack of structuring CRC organ and attaching responsibility (accountability) to the practice of cluster school innovation affected the positive out-come of the intervention. Lack of monitoring and follow-up from the concerned officials also had its negative influence on the proper functioning of cluster resource centers.

The study, therefore, recommends that the innovation would be more productive in students learning if more attention and emphasis be given to clustering school practices. Again, the result of the report shows that it is advisable to work for the improvement of monitoring and follow-up which has great effect in promoting the out-come of the innovation. The result of the study reminds Addis Ababa education bureau to create its organ of CRC for the better practice of CRC environment.

CHAPTER ONE

1. Introduction

1.1 Background of the Study

In Ethiopia under the USAID (Basic Education Program), formerly known as BESO I (Basic Education System Overhaul), from 1995-2002 and BESO II (Basic Education Strategic Objective II), from 2002-2007, schools were organized into clusters with each cluster comprising one training center school. The program is founded by the United States for International Development (USAID) and implemented by the Academy for Educational Development (AED). One of the beneficiaries in this program is primary schools. AED/BESO support cluster school resource center school provided the satellite schools with materials and fund that were used for cluster school-based activities. The Ministry of Education has now made the school-based model of teacher in service professional development a national policy. Regions are now able to design their own cluster programs according to their needs; and their geographic location Leu in Macklin (2004: 2-3).

The in service program which is one of the technical areas of cluster school innovation is being practiced in regional states and city administrations/ councils. In the country, in the eight regional states, cluster activities are coordinated by one central in-service officer, and twelve regional field officers/ focal persons. In the remaining three regional city administrations/ councils, which Addis Ababa takes part in it, the AED/BESO II project central staff work with focal persons selected from among the staff at the City Education Bureau or officers to coordinate implementation of activities USAID (2006).

The major objective of clustering innovation in in-service teacher education component is to contribute to improving the quality of the teaching force to enhance the use of active learning. The in-service training program which is employed through experience sharing would strengthen cluster schools and woreda cluster Resource centers, to build professional capacity of teachers, school directors and education officers, and to improve material support for woreda and school cluster resource centers, school pedagogical centers and study group activities.

The major activity areas of AED/BESO II project in Ethiopia, in component 2 program, is to conduct training sessions for school heads and teachers to reinforce active learning using self-study professional handbook, instructional kits, supplementary materials and CPD courses. Other activity area includes training of integrated instructional leadership training for school heads, woreda and regional education officers in instructional leadership and supervision skills to enable them provide ongoing support to schools and teachers to reinforce the use of active learning methods. Carry out follow-up and support visits to strengthen cluster school management and use of the kits to enhance active learning; develop and improve training models for school heads, teachers and education officers are parts of the activity areas. The activity area takes hold of providing materials support to strengthen school pedagogical centers to support cluster activities.

At the moment, many countries including Ethiopia are found to improve their Education and Training practice through Clustering Schools. In practicing CRC Innovation, education as a change agent enables individuals and the society to make all round participation in the development process by acquiring knowledge, ability, skills and altitudes. According to Leu (2004), there are several elements that have created the environment for change. To mention some: Rapid expansion of student enrollments requiring much larger number of teachers and the necessity of finding ways to prepare and support relatively in-experienced teachers, career-long on going teacher professional development increasingly viewed as a necessity to improve teacher quality and therefore educational quality and consequent necessity that Governments and Donors to invest in increased teacher quality are included.

In the Ethiopian context, according to Nemomssa (2006) cluster-based teacher professional development was not favored by either the ministry of education or the regional state education bureau. The tradition of centralized system did not make them to believe that teachers themselves could facilitate their own professional development. However Tigrai, Harari and Southern Nations Nationalities and peoples Regions (SNNPR) created their try out cluster model based on local needs and geography through small-scale pilot programs. The cluster-based model in Tigray Regional State became Regional Policy and gradually expanded to all school within five years AED/BESO (2002). Now, cluster school innovation is expanded in all regional states and city administrations of the country USAID (2006).

The Education and Training Policy of Ethiopia (TGE, 1994:4) emphasizes the development of problem solving capacity and culture in the content of education, curriculum structure and approach, focusing on the acquisition of scientific knowledge.

On the other hand no one disputes the role and function of instructional materials in cluster resource centers, which enhances the quality of education. The Education and Training Policy of Ethiopia (ETP) marked and emphasized instructional materials under educational support which is tied to educational materials, educational technology and educational facilities.

In this sense both teachers and students learn through physical and sensory involvement in the cluster centers. As it is known instructional materials which are developed by teachers and students of clustered schools create the access to the world of reality, enhancing understanding and enriching experiences. Cluster centers assist in making relationships between the real world and the symbolic world what is pedagogically known as understanding (Amare, 1999:54). It is claimed that clustering can help ease administrative burdens and maximize limited resources by pooling them. Hence linkage among education sites and cluster centers is a core aspect to facilitate learning. Such linkage will be at local level to serve the local community, to create optimum conditions for school based experiences for both trainers and trainees, to share resources and expertise with other professionals.

In addition to this, the document of MOE (2004), emphasizes that, by strengthening in-service teacher education, teachers at every level will be produced with planned opportunities to enhance their professional competences. A principal mode of providing continuing professional development (CPD) to implement primary school curriculum will be through forms of cluster-schools organization.

Teachers in-service professional trainings are conducted in central venue (Addis Ababa education bureau), CRC and at school level. Among the training centers, central venues and school level seems to be effective areas than CRC's. Cluster centers in Addis Ababa city administration have not yet been found centers for conducting professional training. Rather cluster resource centers serve as center of distribution of materials, centers for providing service of scarce material. In some CRC's, management committee which is the combination of principals of satellite schools deal with cluster based activities.

Recently two sites (Birhanih Zare and Leake Adgeh Schools) from Bole and Nifas Silk Lafto sub-cities were selected to give wide range service for the eastern and southern part of teaching staff of primary schools in the city. These sites, which are more organized than CRC's, are equipped with workshop chairs and tables, chalk boards and other costly materials for the purpose of intensifying teaching learning in the area.

Regarding cluster schools in Addis Ababa, there are eleven cluster resource centers in ten sub-cities, where each CRC has four to eight satellite schools. A number of satellite schools in the CRCs' are sixty two. In these satellite schools there are a total number of 57,517 (male = 26,210, female 31, 307) students and 2,264 (male= 1265, female 999) teachers. Further more, one focal person who is selected form each sub-city is assigned to give supervision support for CRC and satellite schools in addition to his routine duty at his respective education department. The above noted cluster primary schools in Addis Ababa are one of the beneficiaries of USID / AED BESO II project.

1.2 Statement of the Problem

The quality of students learning can be improved through many efforts, one of which through the use of creative and productive activities (Wardini, 2004). As it is also mentioned in the Education Sector Strategy (2004), the main objective of any educational system is to cultivate the individual's capacity for problem solving and adaptability to the environment by developing the necessary knowledge, ability, skill and attitude. The skills to be obtained will enable the individual to participate and play his/her role in the overall development of the society he/she lives in and the world community at large.

As it is indicated in the Education and training Policy of Ethiopia (1994), lack of qualified and trained teachers in primary schools has been a problem for years. On this manner, improving the quality of primary education has become a burning issue for the development of education sector in Ethiopia. To improve the situation, AED/BESO II came up with an innovation of cluster school program which teachers can develop their profession in school based model. In this regard, schools of different type in Addis Ababa have been organized into cluster schools to make use of the innovation.

Clustering needs collaboration. Collaboration could benefit individuals, groups, organizations, and their various elements. Consequently, each of collaboration would get individually the information necessary for developing their skills in working with others, and know more about how to solve educational problems through sharing and learning. In a group benefit, collaboration would create better teamwork as a result of mutual understanding through interpersonal interaction.

Clustering schools activate collaborative work among the teaching staff. Hillmilman (1996) indicated that positive interaction with others, would help developing ones' work, and vision. His improvement in the quality of work and vision would result in more success for the group or organization. An organization (school) goal could be reached by using personal and group collaboration to satisfy a customer's need.

Clustering schools through collaborative work improve the quality of teaching learning, involve community participation, improve school management, etc. Based on these motives countries like Austria, Papua and New Guinea have established special resource centers at district levels to train master trainers (resource teacher) who are selected from each member of the cluster in order to conduct trainings in their respective school Kebede (2006).

In the light of clustering innovation the study tries to investigate the practice of cluster school in Addis Ababa city administration based on the practice of training, collaborative work at CRC, improving learning, follow-up and monitoring.

The innovation provide in-service professional training for teachers, supervision and material support for CRC's and satellite school and support for women education. The strategy of clustering school includes collaborative work in CRC, communication and cooperation among school teachers, experience sharing through developing the capacity of teaching staff. However, from the experience of the researcher, loose relationship of CRC's with different echelons in education bureau is not likely to strengthen the practice of CRC in implementing the innovation. Further more, CRC's lack to act as center of collaborative work. There fore this study tries to investigate the practice of cluster primary schools in implementing innovations in Addis Ababa city administration.

1.3 Objective of the Study

General Objective

The main objective of the study is to investigate the practice of cluster schools in implementing CRC innovation in Addis Ababa City Administration. The study also aims at examining problems encountered during implementation of the innovation.

Specific Objectives

Based upon the problem to be investigated, the study is intended to:

1. Assess CRC organization and structure in Adds Ababa.
2. Assess classroom practices in clustered schools.
3. Identify the activities of beneficiaries in utilizing CRC.
4. Assess improvement in students' achievement.

Basic Research Questions

1. How do cluster schools implement CRC innovation as an organized system?
2. How do cluster school innovation practiced at the City Administration?
3. What are the improvements seen in the practice of cluster school innovation?
4. What are the factors that influence the practice of cluster school innovation?

1.4 Significance of the Study

The practice of school clustering is a recent innovation applied in the educational system of Ethiopia. This study shows the current practice based on the organization and activities of cluster schools in promoting learning in terms of collaborative activity, linkage, training and its reflection in the classroom setting. Therefore, the study will have the following significance.

1. It may help the concerned officials to pay due attention to reorganize the CRC at different levels.
2. The study may help the beneficiaries to have clear understanding about collaborative work at CRC which result in improving learning in the classroom.

3. The result contributes to over come the problems that negatively affect the practice of CRC.

4. The study might initiate others who need to make further study.

1.5 Delimitations of the Study

1. The scope of the study is delimited to four CRC's of four sub cities (Bole, Kirkos, Nefas Silk Lafto and Yeka) which are 36% of the total CRC's in Addis Ababa to make the study manageable.

2. To manage the domain and depth of the research problem, the study didn't include UNICEF support cluster schools centers.

3. In addition, the study deals with only the practices of cluster school in making use of the innovation.

1.6 Limitations of the Study

This study has its own limitations. The following were some of the major factors that contributed to the limitation of the study.

1. Most of the sample clustered schools which are found in four sub-cities were far apart and it was difficult to use transport to reach the schools to collect the data within short period of time.

2. Related review literatures were not available because of recent introduction of cluster schools innovation.

1.7 Definition of Terms

School cluster: A cluster is a group of Schools that geographically as close and accessible to each other to enhance education provision (MOE, 2003).

Linkage: refers to task oriented relationship among education departments with cluster centers and those of satellite schools to CRC and each other.

Innovation: refers to any change in one component of the educational system which is not made simply for the sake of change but with the intention of promoting improvements in the aspect concerned and having regard to the close interdependence of all such aspects – in the system as a whole (Nicholls, 1983:3).

Satellite school: A school that is a member of cluster school. A cluster consists of 3-5 (In Ethiopia) schools within the catchments of 5-8 kilometers (MOE, 2003).

Homogenous groups: A group or class consisting of students who does not show variation in grade level and standard of curriculum applied in the school level.

Primary Education: Primary education in Ethiopia takes eight years' duration which comprises the first cycle (grades 1-4) and the second cycle (grades 5-8) MOE (1994).

Cluster resource center: Is the focal point for contact and coordination between the schools in the cluster.

Cluster management committee: Is a forum where teaching and learning problems in schools may be addressed and where principals are empowered by being encouraged to search for solutions in collaborating with their colleagues. Each committee should consists of the cluster center principals as chair person, school principals from each satellite school in the cluster and senior teachers and school board numbers (Dittmar, 2002).

In-service teacher training – refers to conducting training sessions for school heads and teachers to reinforce active learning using self study professional handbook, Instructional kits, supplementary materials and CPD courses (USAID, 2006).

Practice – The exercise of a profession or occupation as, the practice of law.

To use or exercise for instruction, discipline or dexterity.

To put into practice; to use ones knowledge's of, to work at specially as a profession (Simon and Schuster, 1979).

1.8 Organization of the Study

This paper will have five chapters. The first chapter is introduction. Under the introduction, it is tried to see the background of the study, statements of the problem, basic research questions, objectives, significance, delimitation and limitation of the study and operational definition of some important terms. The second chapter is the review of related literature. It provides information related to concepts of school clustering, the objective and model of cluster schools, experience of clustering school in other countries practices in the school that determine innovative action, etc. The third chapter focuses on the theoretical frame-work, research methodology, research design, data collection instruments, and sampling procedures. The fourth chapter deals with data analysis and presentation. In this part, collected data through interview, observation, document analysis, focus group discussion and questionnaire will be interpreted. The fifth and the last chapter of the study deal with summary, conclusion and recommendations.

CHAPTER TWO

2. Review of Related Literature

2.1 Conceptual Framework

2.1.1 The Meaning of School Clustering

A cluster is a group of schools that work together to share experiences, resources and training in order to create opportunities for continual professional development (CPD), necessary for acquiring and retaining the teaching license. Dykstna and Kucita (1997) defined cluster school as follows:

> A cluster school is a grouping of 6-9 primary schools for administrative and educational purposes. It is an organization of schools in the same vicinity or neighboring villages which are grouped together for the benefit of sharing available resources such as teaching and learning materials, facilities and staff so that the access for all children and the educational quality of schools within the cluster are improved. The model implies a degree of decentralization and also permits strong local participation in decisions.

As it is discussed above, the concept of school clustering manifests that schools are a major agency for transmitting mainly to children the knowledge, traditions and values of the society. Broadly speaking, schooling has been interpreted as providing a basic ('elementary' or 'primary') education, a more advanced (secondary) education and a higher (University) education intended to provide intellectual, political and social leadership. Schools have both reflected their society and contributed to its dynamic (Silver, 1994:1).

Clustering schools promote learning for the common good of all schools. A good school is 'good' not so much because of the specific nature of what is taught (though that is important) but through the manner in which a positive, supportive, richly and frequently interactive atmosphere is developed (Silver, 1994:101).

Many NGOs involved in teacher development have used clusters as an organizational tool in their delivery of training. It is believed that clustering can help address the often limited or insufficient impact of cascade training, by providing teachers with additional support. This support is critical at a time when many teachers are struggling to cope with the demands of the

curriculum, such as material development and the radical changes in teaching practice required of them.

Addis Ababa City Administration Education Bureau as other regional education sectors, supported by AED/BESO II project has established its own cluster schools in all kifleketemas (sub-cities) as a way of enhancing service delivery. It is believed that the clustering strategy employed, fits in well with the move to decentralization of educational services.

2.1.2 Objectives of Cluster Schools

Cluster school has various objectives to fulfill. Among these include: economic objectives, pedagogical objectives, administrative objectives and schools-community objectives.

a) Economic Objectives: A country could not afford basic equipment such as supplemental readers, science materials, or even silk screen supplies and paper for each school. Therefore, by furnishing one resource center with equipment and supplies that allowed teachers to make learning aids, several schools benefited. The clusters therefore had an economic objective: Sharing facilities and staff, and bulk ordering of materials such as stationery, Chalk, paper and other supplies for the cluster Conservation of supplies such as promoting systems for the return of school books and better maintenance of schools were also more efficient within a cluster system. Resource center permit teachers to participate in ongoing in service training without distant travel.

b) Pedagogic Objectives: Improved student learning would be achieved through a variety of strategies to be carried out through clusters equalizing student access to teacher specialists and resources (such as supplementary readers). Teachers had also the opportunity to pilot new curricular materials that the ministry with NGO support developed, along with academic competition and evaluation to motivate better performance.

c) Administrative Objectives: Improved administration was sought at all levels through simplifying paperwork, authorization procedures and communication processes primarily by working through the cluster school heads for micro-planning, personnel management, and resource mobilization instead of trying to contact every head master. Authority to supervise and monitor teachers, goal achievement and other functions was developed to cluster heads.

d) School-Community Objectives: Community participation in schools, not only in construction but in many other aspects of school management and learning, was promoted by involving parent-teachers associations (PTAs) in localizing curriculum, monitoring school services, or mobilizing children to enroll at the correct age. Local policies for the use of the cluster schools as a learning centre for adults and a delivery center for other services by development and community agencies were formulated by cluster committees or PTAs (Dykstra and Pawan, 1997).

2.1.3 School Clustering Strategies and Practices

To develop schools capacity at schools and cluster levels BESO (2002) and MaeKelech (2000) reported about clustering approach. The main features of this strategy include: Intensive training of trainers, awareness of head teachers and administrators of school; training of teachers from the established cluster resource centers and from satellite schools by the core trainers; supply to support materials; facilitating experience sharing; supervisory support and effective monitoring.

Preparation for lifelong learning as well as for the knowledge-society calls for a particular kind of educational practice. In order to cope with these challenges the shift from teaching to learning gains importance. To make this practice a reality education institutions have to change from traditional ways of teaching and learning. Again, teachers have to be trained in active learning and student-centered teaching Queis (2004).

On the practice of school clusters and resource centers (Craig, Kraft and du Plessis, 1998:113) described that school clusters employed in Thailand, and Philippines, and Sri Lanka, are very helpful in that they share scarce materials and human resources. Core schools tend to host educational resource centers development and operated jointly in the cluster (typically five to ten schools). The learning action cells in the Philippines exist at the school, district, and regional levels, and are used for school evaluation and staff development for both teachers and principals. Similarly organizational patterns operate in Nepal, in Ciangur project in Indonesian, and in the school zones of Zambia. Small schools, in particular, can benefit from clusters of schools teaming together.

2.1.4 Practices of Resource Decentralization to Maximize School Performance

Five types of resources are being decentralized in schools, in order to maximize performance Quijano (2004). These are power to make decision, knowledge, information, a vision mission statement and school improvement plan, and rewards.

- The power to make decisions influence organizational practices, policies and direction. Effective school leader in his decision can show the way in setting the schools vision, coordinate reform efforts and rally the support of the parents and the community behind the school.
- Knowledge includes technical and managerial knowledge and expertise to provide the services needed. The kinds of knowledge which is implemented to decentralize management are training, team work skills and organizational knowledge. The training expand job skills, widen perspective, and promote openness to change, where as team work skills for participating in governance and management such as problem solving, decision making and communication skills. Organizational knowledge is for responding to changes in that environment.
- Information about the performance of the school or school cluster includes revenues, expenditures, student performance strategic information and economic environment.
- A vision mission statement and school improvement plan are used by educators and community stakeholders at the school site to help them define school goals and standards, strategies, assessment that measures progress toward reaching the goals, and to share information with the community-at-large.
- Rewards are based on the performance of the organization and the contribution of individuals.

As the practice of Philippines indicates decentralized management is most effective when there is agreement on targets and standards, and teachers, school heads and division superintendents accept accountability for there own performance.

2.1.5 Learning Models which Enhance Students Performance in the Teaching-Learning Practice

The practice of Indonesia shows that learning model is developed based on some learning approaches that are assumed to enhance students' performance Wardani (2004). Those approaches are active learning, constructivism, collaborative as well as cooperative learning, and creative learning. Wardini (2004) expressed that active learning require optimal involvement of the students in learning where as in constructivism learning should emphasize the construction of meaning by the students. Collaborative and cooperative learning enable students to work together in a group, to help each other, to share responsibility, and to experience team competition.

Creative learning, basically enable the student to be creative. For this one should have high commitment, hard working ability, enthusiasm, and confidence (Erwin gegal, in Balck, 2003).

In the active learning model the students are required to undergo exploration activities that facilitate them to explore the concept or problems being learned from various relevant learning resources. In construction, learning requires self regulation and the building conceptual structure through reflection and abstraction (Von Glassers Feld, in Murphy, 1997, p. 3). Accordingly, collaborative and cooperative learning assign students to study in groups, either heterogeneous or homogenous groups, in achieving the same goal. In creative learning model, the students challenge to creatively produce something based on their perception or understanding on the topic being studied. This model can be applied at all level of education, from elementary to higher education Wardani (2004).

2.2 Cluster School Practices in Implementing Innovation

To manage innovations effectively implies elements of planning, control, direction and order Nicholls (1983). On the other hand the growing demand for highly educated work force needs a change in the teaching learning process at school. Therefore, cluster school innovation as part and support of school practices in implementing classroom learning, considers the following dimensions Derbessa (2004).

Planning: A careful planning is a necessary prerequisite for implementation, which would address the needs, changes necessary and resources required for carrying out intended actions. It

involves establishing and determining how to administer policy that will govern the planned actions. Effective planning must

relate to a desired and identifiable change that is to be implemented. Planning focuses on these major factors, people, programs, and organization.

Communication: Frequent discussion about a new program among teachers, principals and curriculum workers is a key to successful implementation. If the new program is a major change from the existing program, then the curriculum leader can profitably use such communication vehicles as workshops, meetings, role playing situations, demonstration sessions etc.

Cooperation: Cooperation between all persons who are to be involved with program implementation must occur if a change is to be successful and to become institutionalized. The teachers' full cooperation is required in practicing the new ideas and programs that will find expression in their classrooms. If teachers actively participate in curriculum development and implementation, it is likely that implementation would be effective. It is said that the best educational practice is unlikely to fulfill its promise in the hands of an inadequately trained or unmotivated teacher.

For proper implementation of the curriculum, adequate training prior to implementation, and support and monitoring during implementation is a standard approach. Reflected that effective implementation requires time, personnel interaction and training. The role of teachers is critical in the implementation process, for there would be no curriculum implementation without teachers and students.

Support: In-service training program for teachers, administration and such other personnel acquainting them with the new program and its practical aspects, can be a necessary support activity. In service programs must reach the intended audiences and should be accessibly scheduled for curriculum implementers. Money is required for materials and equipment to institutionalize a new program and also to have human support for the implementation effort. Implementation is a collaborative and emotional effort where peer support can be a vital input for success. Opportunities for teachers to work together, share ideas, jointly solve problems and cooperatively creating materials greatly enhance the probability of successful curriculum implementation.

Besides this, an education system will not succeed in attaining its objectives only for changes in the curriculum or in (the method of) teacher training. It needs the participation of the community.

> *Educational institutions will be autonomous in their internal administration and in the designing and implementing of education and training programes, with an overall coordination and democratic leadership by boards or committees, consisting of members from the community (society), development and research institutions, teachers and students TGE (1994:30).*

The above mentioned description in the policy decentralizes the organization of education and makes both the community and professionals responsible and accountable for the educational process. Thus, the previously centralized organization of Education has now devolved to the various levels of regional and local administrations. Easton & et al (1999:viii) noted:

> Most authorities recognize that the quality of primary children's work and learning depends up on the skills of their class teachers, not in the structure of management systems, policy documents or the titles and job descriptions of staff. Many today recognize that school improvement of teaching so surely all tasks, other than imparting subject knowledge, are merely a distraction for the committed primary teacher.

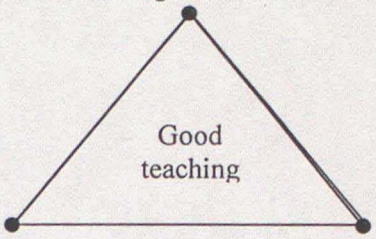
Policy statements and structure of management by itself could not bring a change on the child's learning. The classroom teacher is the immediate agent for the improvement of children work and learning. Although Children learning improvement is highly correlated with day to day activity of the teachers, all tasks of school improvement is not the sole responsibility of the teacher.

The task and obligation of the teacher to act as a blue print in the classroom setting is crucial to play his role in the changing world besides decentralization of education. As it is verified by Queis (2004) teaching competence can be shown in three aspects in the following figure.

Figure: 1. Teaching Competence

Subject matter competence

- Knowledge of material/subject
- Research ability
- Selection and organization of course content



Personal Competence

- Friendly approach, accessibility
- Willingness to help
- Communication Skills
- Positive attitude towards students
- Fairness in examination and grading

Delivery Competence

- Presentation skills
- Variety of methods
- Use of media
- Developing motivation
- Active learning

The figure above shows that good teaching takes place in the classroom when the teacher capable of having subject matter competence (knowledge), personal competence and delivery competence. A teacher could develop these capabilities through experience sharing, communication, collaborative work, devotion and the like.

Schools Operation in Terms of Practice

The critical aspect of a school's operation is defined in terms of practice in three dimensions of schooling. These are teaching and learning, leadership and culture, school development and management. As Neville (1997) noted the area of learning and teaching is manifested in aspect of teaching learning environment and classroom interaction. The teaching learning process is planned and implemented, assessed and reported, reflected and evaluated. In the process of school review the area and aspect of the frame work is the bench mark to evaluate how learning and teaching are promoted. The framework also emphasizes leadership and culture as a core aspect of school review. The aspect of contextual and inclusive leadership for change and learning is reflected as one of the dimensions in the framework. The other core aspects of school review is school development and management which is tied to school purpose, planning, improvement and managing fundamental change.

2.3 Experiences of Other Countries

To build the capacity of teachers' professional development for better implementation of classroom instruction, clustering school innovation was practiced in different parts of the world. Ethiopia is among them. Although the main objective of clustering school is to improve classroom instruction, experience of practicing the innovation differs from one to the other. As there are similarities there are differences in the system of implementation. Since clustering schools is a recent innovation one can share and learn from the experience of others

In case of school Improvement perspective all forms of in service training are not equally effective. Regarding this, Hopkins (1986:268) gives an indication of what in service training within school improvement is like:

1. The need for in service training to be integrated with part and parcel of concrete program change and problems experienced at the classroom and school level. It should have a project or program focus.
2. Within these programs, in service should be intensive and ongoing.
3. The ongoing process of professional development must be linked to school building or organizational development efforts. Both teachers and administrators should be involved in in-service.
4. In-service training should be simultaneously directed as skill specific and concept development, over time.

Teachers' development occurs basically as the result of effective in-service training designs. Hopkins argued for an approach to in service training and the identification of in-service training needs a school improvement focus. He feels that both in-service training and needs identification' should not be discrete activities, but linked together within a whole school improvement strategy.

The following countries; Cambodia, Uganda, Malawi and Haiti exercise cluster schools innovation to enhance, quality of education in primary schools. In most cases there are similarities in the objectives, activities and contents of training program where as there is a difference in system of organization and provision of training. All are USAID support countries.

Similarly AED/BESO project II support schools in Ethiopia shares the above listed countries experience with its exclusive difference.

2.3.1 Cambodian Experience

The overall objective of cluster schools: in Cambodia is to redress any imbalance in education by grouping schools that are located near each other into a cluster, mixing strong schools and disadvantaged schools in such a way that the latter benefit from the advantages of the former.

Common Responsibilities of Provincial, District and Cluster Committees: A cluster school committee is formed at each level. There common functions are to set goals for access to education and reduction of wastage rates. They implement educational reform, each at an appropriate level and specialty, monitor the distribution of supplies and facilitate the construction and repair of school buildings. More importantly, they work vertically to assure that there is communication between levels and regular consultation to solve problems. They also work horizontally to provide training in concepts of cluster management and supervision. As cluster schools became nationalized, skilful teachers or education officials at the provincial, district or cluster levels, who had gained adequate experience from the project, became national trainers for new clusters in order to expand the model.

The district education office is responsible for the operation of clusters within district boundaries, and for achievement of the plan to meet the district education goals. The cluster school head supervises all headmasters in the cluster, sets the teacher-training schedule with other numbers of the committee and assumes that materials from the resource center and teachers are supplied equally to all schools in the cluster.

Every cluster maintains a resource center where teachers come to share and make teaching aids. Resource centers display data and graphs on wastage, and disseminate other information to educators and community members.

Technical committees are responsible for the improvement of teaching and learning especially in support of the new curriculum. The cluster school technical committee establishes a training calendar for teachers. Cambodian policy sets every Thursday as an in-service day. The agenda for weekly training meetings include the preparation of lesson plans, development of teaching aids, class demonstrations and a summary of the weekly meeting as well as plans for the next

month. There are often cluster-wide training events in the resource center especially when new textbooks are introduced.

Parent-Teacher Associations: In Cambodia, parents and communities traditionally contribute to school construction and renovation. The cluster schools build on this tradition but also involve parents and communities in educating their children. PTAs help verify the reasons why children drop-out or don't attend school and they set goals to remedy these problems etc Dykstra and Kucita (1997).

2.3.2 Ugandan Experience

Ugandan Primary Education Reform Project supported the design and management of the Teacher Development and Management System. This system had five functions:

- Training teachers and headmasters who lacked basic training or who were under trained;
- Giving refresher courses to certified teachers and headmasters;
- Managing resource centers that provide outreach service for teachers;
- Linking primary schools to primary teachers colleges the Ministry of Education and Sports, and Communities;
- Coordinating education reform initiatives such as universal primary education and the promotions of girls' education.

The system was linked to primary teachers colleges. These colleges, in addition to providing traditional campus-based pre-service teacher training, also directed and supported a net work of five hundred and thirty-nine resource centers, or coordinating center schools. These schools were served by outreach staff, called coordinating center tutors, from the teacher training colleges. The outreach staff were responsible for providing support to schools and headmasters in the form of classroom observation; refresher courses, seminars, and workshops in school management and teaching methodologies; and training support of community mobilization volunteers, school management committees, and parent-teacher associations.

The support for Uganda Primary Education Reform (SUPER) has been considered one of USAIDS success stories due to the government's commitment to making sure that reforms were implemented. Furthermore, community members and parents have become more involved in the

education of their children contributing further to the sustainability of in-service activities Engels (2001).

To summarize the experience of other countries taken as an example above, we can conclude that in order to be successful and sustainable, in service and cluster programs must address the needs of the teachers. All stakeholders must form partnerships and there should be full involvement by communities and parents. Furthermore, programs and implementations of the project that have been designed according to the specific needs of a country and teachers have also been successful and sustainable. A program to be sustainable and effective monitoring and evaluation by observation and reporting systems that match curriculum goals of the cluster should be under gone.

2.3.3 Malawi's Experience

Herbart and et al (2002) expressed his view on Malawi's practice of decentralized organization of education, mentoring program and content of curriculum in the cluster network. In order to enhance the quality and efficiency of education in Malawi USAIDs Quality Education through Supporting Teaching (QUEST) project was established in (1998-2002). The QUEST project was a joint activity between the MOEST, MOGYCS, the Malawi Institution of education, and communities for targeted at decentralizing action down to the school level. The purpose of the project was to support teacher professional development and provide for the establishment of a support network for teachers.

Primary Education Advisors (PEAs) and the identification and training of mentor teachers are involved in the support network. Mentors provide support to teachers on-site and through cluster training within a school cluster network. Some of the methods used including: grouping strategies, role playing, pair work, participatory approaches and integration of songs into classroom instruction. The topics included in the program content included diverse teaching methodology, utilization of local materials for teaching and learning, teacher awareness of pupil participation and performance, continuous assessment, practical skills, effective teacher supervision and the like.

2.3.4 Haiti's Experience

Dehasse and et al (2002) mentioned about the experience of Haiti based on the development of school clusters. As it was explained, education 2004 in Haiti was a USAID project implemented to help improve the quality of primary education from 1997-2002. In Haiti, clusters consisted of groupings of five or six schools in close geographical proximity to teach other.

The USAID project, Education 2004 provided direct training to the school teams of every school in a cluster. In Haiti a school community advisor was assigned to a cluster to live in the local community and support quality improvement at the schools of that cluster. Teachers in a classroom were at the schools of that cluster. Teacher in a classroom were given regular support as they incorporated new teaching methodologies.

Experience Gained

As to the practice of Cambodia, an in service day appears every Thursday for weekly meeting of teachers to weigh the pros and Cons of their cluster activity. In Uganda, community members and parents share the biggest responsibility to involve in the school improvement. Where as, in Haiti direct training is provided to the school teams of every school in a cluster. Malawi emphasizes decentralizing action down to the school level. On the other hand all countries share the same experience in supporting teachers' professional development, and experience sharing among beneficiaries (teachers, principals, communities). Schools in the mentioned countrie are grouped in close geographical proximity.

2.4 Goal of the Education and Training Policy of Ethiopia

The chief goal of Education and Training Policy of Ethiopia is the cultivation of citizens within all-round education capable of playing conscious and active role in the economic, social, and political life of the country at various levels (MOE, 2002). In the strategic goal of the policy the document mentions that a fair and equitable distribution of quality education as rapidly as possible to all regions, particularly to rural areas where 85% of the population live. Since the expansion of quality primary education to all citizens is not only a right but also a guarantee for development, the policy direction indicates that the aim is not merely to raise the standard of the education of the few, but to

- Universalize primary education

- Expand secondary education in synchronization with the number of primary school students and the desire for higher education; and also
- Expand higher education institutions based on the countries professionals manpower needs (MOE, 2002:16)

Primary School Education in Ethiopia:

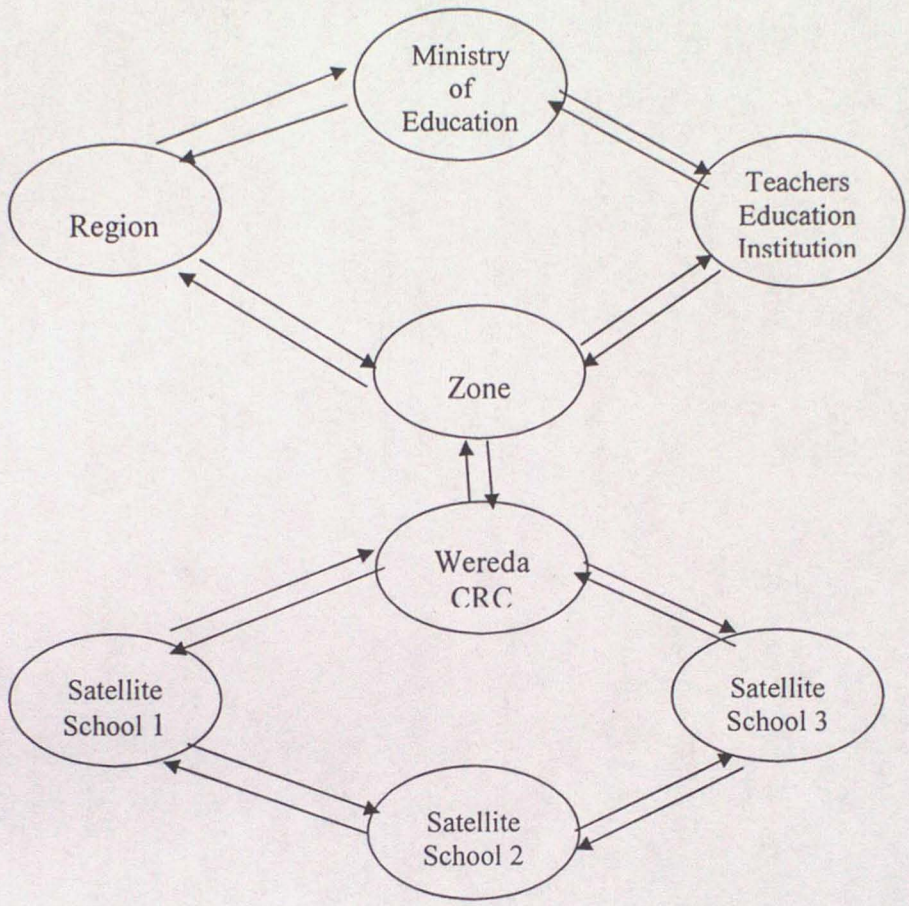
a) **Primary Education:** The primary school students are within the age of 7 to 14. It is divided in to two cycles. The first cycle is from the first to the forth grade, while the second spans from grades five to eight. In primary school, starting from the first grade, subjects are offered in particular learner or integrated form, to enable students have solid foundation in subjects that require special focus such as: Science, Mathematics and Language more periods have been given. Students of grade seven and eight are taught Physics, Chemistry, and Biology as learner subjects. The curriculum in the first cycle (Grades 1-4) has been integrated in to four core subjects. These subjects are: languages, Environmental Science, Mathematics, Aesthetics and Physical education. To enable school children to have a general and interrelated concept and knowledge it is harmonized with child learning psychology.

b) **Contribution of primary school education:** just as education is provided at various levels and towards various ends, it also has both social and individual utility. Primary school education contributes to the society at large by empowering students with knowledge and skills to improve their standard of living and to solve problems. Basic education is useful both to the society at large and to the individual, for it has economic, social, and political benefits. Again it enables citizens to participate in the democratic process. Further, it contributes to agricultural development, to family life, health care, nutrition, birth control and the proper nurture of children.

Structure and Responsibilities in CRC

MOE (2002:51) introduces the concept and implementation of school clustering. Based on this AED/BESO (2003: 2-15) reflects the responsibilities of Ministry of Education, regional Education Bureau and Zones, Woreda Education Office, TEI or TTC, CRC management committee, CRC principals and key teachers. MOE (2002:55-58) manifests the organization of education as the following.

Figure 2 **Structure of CRC**



Source : MOE (2002)

According to (MOE, 2002) the responsibility of each level is mentioned as follows:

Ministry of Education is responsible for preparation of guidelines, resource identification and provision, coordinating and developing project ideas.

Regional Education Bureau and Zones are responsible for establishment of strong link between the clusters and TEIs and TTCs, coordination and establishment of school clusters, supervision, provision of training to resource persons and strengthening resource centers.

Wereda Education Bureau is responsible for establishing the clusters, conducting training need assessment, conducting and evaluating programs, providing best practice of teaching learning methods.

Cluster Resource Center Management Committee

The committee include cluster center principal (Chairman), Satellite school principals, senior teachers, and school board members. The committee is responsible for planning cluster activities, identifying training needs providing short term training programs, creating opportunities for mutual sharing of experiences, improving the functioning of the clusters and professional development of teachers. It is also responsible for identifying mechanisms to promote community participation, coordinate and implement collaborative work among stakeholders, creating relationship with concerned officials and supervisors.

Teachers Education Institution (Teacher Training College)

The TEI (TTC) support cluster schools by providing training on professional development of teachers. Make assessment on training needs of teachers. Create close contact and work collaboratively with partner schools.

CRC Principals form link between satellite schools, provide leadership and supervise the activities of CRC, promote the formation of subject group to improve the teaching learning process, conduct follow-up and evaluation program.

Content of Training in Cluster Schools Resource Center

Content of training in CRC according to (MOE, 2002) include the following. Concept of clustering schools and its organization, participatory method of teaching (student centered approach), preparation of local curricular materials, developing and using teaching aids, continuous assessment, lesson planning and its usage, classroom management, school and community, action research, evaluation and measurement, HIV/AIDS, mentoring, etc.

- **Indicators of follow up and Evaluation in Cluster Schools:** Participation of students in the teaching learning process, participation of women, repetition rate, drop outs rate, results of students as compared to the previous year, participation of teachers in educational research, implementation of student centered approach, levels of preparation of teaching aids and its usage, method of problem solving in teaching and learning. (MOE, 2002). Community participation, devotion, gender balance, neat and attractive environment (ባህር ዳር፣ 1997).

- **Method of Follow up and Evaluation in CRC** includes; monthly, quarterly and semester report, exhibition, meetings and filed trip (MOE, 2002).

On the other hand, the process of follow up and monitoring of cluster schools in Amhara Regional State is carried out in the following way (ባህር ዳር፣ 1997)

Education Bureau: Carry out evaluation on selected sample schools, evaluate quarterly reports and monthly experience sharing among the beneficiaries, prepare regional experience sharing session.

Zone education department: Evaluate the activities of woreda offices every month, evaluate the support given and the follow up made in their respective cluster resources, carry out follow up and monitoring on selected sample schools in the woreda's, produce best practices, experiences and send quarterly report to the regional bureau.

Woreda Education Desk: Supervise each clustered school two times (minimum) a year, evaluate the practices of cluster schools through monthly meeting, produce best practices, experiences and send monthly report to zone education desk and feedback to clustered schools resource center. Check and evaluate the activities of satellite schools every month and report to woreda education desk. Carry out monthly meetings with clustered schools and carry out group evaluation in each member school.

College of teacher education: Evaluate training programs and its implementation; evaluate the result of training by paying visit to selected sample clustered schools.

2.5 Cluster Schools Model

MOE (2000) identified the following five models of school clustering.

a) Cluster schools within 8 kms Model: This Model represents training given at cluster schools resource center. Teachers who are skilled give the training. Training needs are identified by cluster resource center management group.

b) TEI Model: Qualified teachers education institutions staff primarily gives training at cluster resource center. Training needs are identified by schools and relayed to the TEI cluster coordinator. Regional education bureau and the TEI monitor the cluster activities. Moreover, linkage of TEI's with cluster schools is the aspect of this model.

c) Out Reach Model: Competent and motivated primary teachers give the training at either in the individual school level or CRC. The out reach trainers give the training under the supervision of TEI's or WEDs. The training needs are identified by the schools and tutors.

d) High School Model: Experienced, expert teachers, TEIs or REB experts give the training based on the needs identified at the cluster level. Schools are relatively equal in resources. Training is rotated through different high schools, as distances are likely to be quite far. Regional education bureau monitor the schools.

e) Isolated Schools self-Study Model: Training is given through identified key teachers or experienced teachers based on needs identified at the school level. The monitoring activities could be done by Woreda Education Office. To be successful in this model, communication of good practice between other schools and clusters must be very efficient. Furthermore the access to simple training materials and modules to provide "new ideas" and training guides is very essential. It is also essential that funding is secured to enable some contact between schools (MOE, 2000).

2.6 School Based Professional Development and Training

The system enables neighboring school principals and teachers to build their professional capacity at school level. In this system both teachers and principals participate in the training of teaching method and instructional leadership skills. The training contributes for school improvement. (ኤኢዲ ቤሶ ፕሮጀክት፣ 1995) indicate benefits of clustering schools. These are:

- It creates suitable condition for in-built or in-school supervision
- It enables both principals and teachers to participate in professional development program.
- Facilitates different kinds of competition (sport, question and answer, etc.) among schools.
- It creates school networks among schools. This would help for experience sharing and support each other in the teaching learning process.
- If strengthen team work among principals and teachers
- It helps to exchange information with education departments easily.
- It is helpful to provide Mobil library service

- It strengthens the participation and awareness of female students.
- It develops awareness about HIV/AIDS etc.

The Education and Training Policy (ETP) of Ethiopia, (MOE, 2002:117) denotes that it is difficult to ensure the permanence, reliability and continuity of the ever-expanding educational system by depending on the limited budget and leadership of the Government. Thus a system of educational finance, administration, and leadership should involve the community as a major stakeholder to support not only financially but also in the leadership and administration of education.

To re-constructionists, schools are instruments of change, a way that society can address and correct economic and social ills (Sadker, 1997:144). To avert the crisis in education sector, Freire (1970) highlighted the distinction between schools and education where schools can either educate or liberate, or miss educate and oppress. To Freire, through education, the peasants learned to read, to act collectively, to improve their living conditions, to reconstruct their lives. Hence clustering strategy as a tool of change in education is to improve communication networks, interaction in school communities on the basis of skill, knowledge and resource sharing.

As it is stated in the policy by clustering schools at a given locality, resource centers provide educational equipment, reference books and so on for the common use of teachers in order to enhance their capabilities. Thus, by clustering around resource centers, teachers may benefit in the following ways (MOE, 2002:52).

- They get on-the-job training; they exchange experiences by learning from each other. They can prepare teaching aids by using the equipment in the resource centers.
- They may borrow reference books from the resource center. In order to change the focus of teaching to student centered approach, teachers with rich experiences in the area can share their expertise and train those with lesser expertise.
- Supervisors coming from the Woredas, (Administrative unit within a Zone) Zones, (administrative unit within a region) or Regions (Administrative unit under the Federal Government of Ethiopia) as well as other invited professionals can give support to teachers.

- Teachers who are organized around resource centers have a chance to exchange and share their experiences. Model teachers from a given school can be made to give classes in another school that is a member of the cluster, and teaches in the latter can have the chance to observe such model teaching.
- Gathering around the resource center teachers can evaluate text books, enrich them, and make recommendation for their improvement to their Region's Curriculum Department.
- They can discuss and exchange experiences on issue directly related to education such as handling students, the manner extra curricular education is directed and organized, and the relations between schools and communities.

In Service Teacher Education: The training practice by AED/BESO II project (USAID/AED, 2006) is summarized as follows.

The training strategy is implemented at three levels. These are central venue training, cluster resource center (CRC) level training and school level training. The central venue training center is the first face to face method that is conducted in the regional level with primary school teachers, head teachers and education officers. Where as in the CRC level, the trainings conducted are small and take place at the cluster school centers or sub-city education department. At this level, trainers who have participated at central venue are expected to conduct training for satellite school teachers. The participations from the satellites share their experiences in study group meetings and discussions. At the school level, the whole staff participates in the training. The training is conducted by school directors, staff participates in the training. The training is conducted by school directors, key teachers and education officers who were trained at cluster center or central venue.

The activities at the central venue training focus on regional needs and interests which focuses on different themes of student centered/active learning methods, continuous assessment teachings, management of large class size in relation to active learning, school based action research, instructional leadership, supervision and coaching, preparation and usage of teaching and learning materials from locally available resources, awareness creations for female teachers in leadership skills and related topics such as civics, environmental education, HIV/AIDS, etc. Where as the activities to be promoted at CRC levels are similar to those provided at the central

venue(s) but more emphasis is given to the actual situation existing around the cluster center and its satellite schools. The activities conducted at school level are similar to that of CRC or central venue, but more emphasis is given to the actual situation existing in the respective schools. Training at this level is supported by discussions and experiences sharing sessions of teachers' study group activities.

As the document further explained the skill transfer at the school level is the actual application of knowledge/skills by all trained teachers at classroom level. Different modules and course books on the topics mentioned above are developed and distributed to teachers and schools by AED/BESO II project. Finally the document reminds education officers of different levels to apply a follow-up visit and supervision at all training centers.

2.7 Practices in the School that Determine Innovative Action

Innovations developed outside the school meet very different fates in different schools. Nicholls (1983:62) noted that the innovation that brought lack of impact on schools has led to current emphases on school based innovation. However, as the writer noted, there are certain factors in the organization that determine the extent to which it is able to innovate successfully. The factors to be mentioned here are organizational arrangements, school climate, and communication.

a) Organizational Arrangements:- The way in which a school, a department, or a class is organized is not an end in itself but rather is intended to bring about desired aims and objectives. It is, therefore, essential to scrutinize organizational arrangements to ascertain whether they are facilitating or hindering innovations. Organizational arrangements that can influence innovations may be relatively minor and obvious, for instance, timetabling, rooming and examination arrangements, or more major and fundamental, for instance delegation of responsibility and channels of communication.

It is worth remembering that if the organizational changes require teachers to undertake new roles, adequate time must be allowed for this and in the meantime there may be a period of temporary inefficiency (Stinchcombe, 1965).

The implication for the managers of innovation of the relationship between organizational arrangements and innovation is that they should regard school, department and classroom

organization as flexible and dynamic, not fixed and rigid, and that they should therefore be alert to the effects of these factors and be prepared to modify them when necessary.

b) School Climate:- A more scientific study of organizational climate was carried out by Halpin (1967). The classification he derived from his study has been used in relation to the innovativeness of schools. The six climates which are suggested by him are summarized as follows:

Open:- There is a high level of morale and teachers work well together. Group members enjoy friendly relationships. The principal sets a good example by working hard and he either criticizes or helps teachers according to the circumstances. He provides subtle direction and control but does not monitor the work of his staff too closely. He is in full control and provides leadership for the staff.

Autonomous:- The principal gives almost complete freedom to the staff to provide their own structures. Teachers work well together and accomplish the tasks of the organization. Morale is high. The principal doesn't personally check that teachers are getting things done and lets them work at their own speed. He sets an example and works hard himself. He has sufficient flexibility to maintain control and to be concerned with the personal welfare of teachers.

Controlled:- The emphases here are on achievement at the expense of satisfaction of social needs. There is high morale and teachers get on with the job. There is an excessive amount of paper-work and few procedures exist to facilitate their work. The principal is authoritarian and controls his staff closely. He is aloof and cares little about people's feelings.

Familiar:- The main feature of this climate is the friendly relations between principals and teachers. The emphasis is on satisfaction of social needs at the expense of task achievement. The principals exerts little control or direction and is concerned to keep a happy family atmosphere.

Paternal:- The teachers do not work well together and do not enjoy good relations and have given up trying. This climate is characterized by the principal's ineffective attempts to control the teachers. The principal's fails to motivate his staff because he does not provide an example or an ideal which they wish to emulate.

Closed:- Group members obtain little satisfaction in either task achievement or social needs. The principal is ineffective in guiding their activities and not inclined to consider their personal welfare. Morale is low and teachers do not work well together. The principal doesn't provide adequate leadership.

According to help in the school Climate noted above is arranged in order from open to close. An open climate begins characterized by flexibility and a closed climate by rigidity.

c) Communication:- The establishment of clear communications within an institution was one of the requirements of a healthy organization. Deficiencies existed in communication both between the headmaster and staff and perhaps more surprisingly, among the teachers who were involved in the innovation. Communication tended in one direction, from the headmaster to the staff took the form of a rather imprecise written statement. The staff did not derive a clear picture of the innovation from this form of communication. Lack of communication might include insufficient time, deficiencies in knowledge or an assumption of shared meanings Sharp and Green, (1975).

Communication is a two way process and teachers need to be willing to communication with the head as well as listen to him. It has to be recognized that it is very difficult to create in schools the condition and the climate which is clear, unambiguous and open communications operate, particularly when innovations are involved. Innovations involve risks, create uncertainties and doubts and include the possibility of temporary incompetence and even failure, while teachers are expected to display competence, have knowledge and be successful, especially if they are ambitious (Nicholls, 1983:72).

CHAPTER THREE

3. Research Design and Methodology

3.1 Method of the Study

As mentioned earlier the main objective of this study is to investigate the practice of cluster school in implementing CRC innovation and problems encountered during implementation. The method employed was mixed method on the assumption that it is more appropriate to gather variety of data related to the study.

Mixed method which enables to collect diverse types of data best provides an understanding of research problems (Creswell, 2003: 21). Therefore, the researcher believed that the method chosen describe the practices of CRC innovation in the city. To answer the question of validity, one method triangulates the other method in the study.

3.2 Sources of Data and Sampling Procedures

The sources of data for this study include the following informants. Staff development facilitators, principals, key teachers, teachers, and students, focal persons of AED/BESO at sub-cities: and Addis Ababa Education Bureau representative for cluster schools at the Education Bureau. Member of AED/BESO II training team at MOE, and representative of cluster unit at KCTE are included as informants of the study.

Addis Ababa Education Bureau CRC

Table 1: AED/BESO II CRC's Population in Addis Ababa

No	Sub-city	AED/BESO support schools			Number of teachers			Number of students		
		CRC only	Satellite school	Total	Male	Female	Total	Male	Female	Total
1	Gulele	1	4	5	100	70	170	3127	3661	6788
2	Kerkos	1	6	7	126	70	196	3017	3506	6523
3	Arada	1	7	8	87	55	142	1796	2213	4009
4	Kolfe keranio	2	10	12	134	99	233	4100	4800	8900
5	Nifas silk lafto	1	3	4	85	100	185	2684	3619	6303
6	Akaki	1	4	5	112	100	212	3704	4094	7798
7	Bole	1	3	4	75	58	133	1617	2319	3936
8	Yeka	1	4	5	117	81	198	2137	2359	4496
9	Addis Ketema	1	5	6	360	313	673	1526	1849	3375
10	Lideta	1	5	6	69	53	122	2502	2887	5389
Total		11	51	62	1265	999	2264	26210	31307	57517

Source: Addis Ababa City Administration Education Bureau (2006)

Addis Ababa city administration has ten sub cities. In each sub- city there is one AED/BESO support cluster schools resources center except Kolfe Keranio which has two cluster resource centers. Hence the number or CRC's in the city is eleven. As it is shown in the following table 2, out of eleven CRC's Birhanih Zare primary school (Bole sub-city), Fitawrari Leake Adgeh (Nifas Silk Lafto), Abyot primary school (Yeka sub-scity), and Temenja Yazi (Kirkos sub-city) which consisted of 36% of the total CRC's were selected using simple random sampling. In the selected CRC's there are 20 member (Satellite or clustered) schools. From these, 60%, which were twelve in number are included in the study using simple random sampling.

Four focus groups: each group consists of ten students (male and female), total forty students from the selected CRC are included in the study using purposive sampling. Purposive sampling technique was applied to get the necessary information about the implementation of the innovation from students who could describe the classroom situation and teachers activity. The focus group was also formed to represent the target CRC student population because of

homogeneity the focus group has with other students; in grade level, standard of curriculum applied and AED/BESO II Project support. Again, using purposive sampling, six principals were selected among the informant principals. The reason for selecting purposive sampling was to get the necessary information about the practice of cluster schools in making use of the innovation from the persons who have a better know-how about the topic under study. Furthermore 17 key teachers were selected using available sampling and 120 teachers (25%) were selected using simple random sampling.

Table 2: Sample Cluster Schools and Total Number of Target Population

No	Cluster schools center and grade level	Sub-city	Number of satellite schools and samples	Number of teachers in cluster schools and sample taken			Sample student from cluster schools center			Sample staff development facilitators	Principals	Key teachers	Focal persons	Total
				M	F	T	M	F	T					
1	Abyot primary school (1-8)	Yeka	5	35	41	76	5	5	10	1	5	3	1	96
	Sample		2	10	4	14	5	5	10	1	2	3	1	36
2	Temenja yazi primary school (1-8)	Kirkos	7	82	51	133	5	5	10	1	10	7		161
	Sample		4	36	24	60	5	5	5	1	6	7		57
3	Birhanih zare primary school (1-8)	Bole	4	66	53	119	5	5	10	1	7	5	1	143
	Sample		3	15	7	22	5	5	10	1	3	5	1	51
4	Fitawrari leake Adgeh Primary school. (1-8)	Nifas silk lafto	4	6	83	150	5	5	10	1	6	2		169
	Sample		3	13	11	24	5	5	10	1	3	2		53
	Total	4	20	250	228	478	20	20	40	4	28	17	2	569
	Sample	4	12	74	46	120	20	20	40	4	14	17	2	197

NB. One focal person and one CRC representative from Addis Ababa Education Bureau are included in this study. As shown in table 2, the total population under study is 569 out of which 35%, of the population was taken as sample of the study.

3.3 Instruments and Procedure of Data Collection

In this study qualitative and quantitative methods triangulate each other for validity and reliability of the study. Denzin in Patton (1983) states that methodological triangulation; make use of multiple methods to study a single problem or program. Hence, for the success of the study the researcher would generally employ five types of data gathering instruments: questionnaire, interview, focus group discussion, observation and document analysis which evolve both quantitative and qualitative data.

3.3.1 Interview

For this study, interview (Semi-structured) guides were developed to collect data from staff development facilitators, principals, focal persons of sub-cities, focal person of AED/BESO and representative of cluster schools in Addis Ababa Education Bureau. An interview guide which is a list of questions or issues that are to be used in the course of an interview was prepared. The guide provides topic or subject areas about which the interviewer is free to explore, probe, and ask questions that would elucidate and illuminate that particular subject. In semi structured interview, an interview guide enables the interviewer to have more latitude to probe beyond the answer and thus enter in to dialogue with the interviewee (Tim, 2001).

3.3.2 Focus Group

In the social sciences, the focus group is becoming an increasingly frequent technique for interviewing, research participants (Burto, 2000:186). The advantage of using participants who knew each other meant the friends or colleagues were able to relate comments made in the focus group to events in their every day, shared lives. A focus group is more than a group interview or discussion because of interest shared by the group and the use of participants' interaction as research data. As it is suggested in the literature, the ideal number for a group is between eight and twelve.

Laws (2003:300) reminded that focus groups do not produce statistics and data collected could be complex to analyze. For focus group discussion in this study, the researcher was guided by a checklist taken from (Laws, 2003:301) (refer to appendix 5). Participants of the focus groups are students of 2nd cycle from four cluster school centers. One group consists of 10 students (5 males and 5 females) in each CRC. Therefore, total of four groups are formed for the study.

3.3.3 Document Analysis

Documents related to distribution of materials, CRC report, clients File, minutes of meetings, plans, list of books and supplementary materials, list of facilities that provide information about the activities of the center were examined. To learn about the improvement of dropouts and detainee rate of students', documents were observed and analyzed to support the study. Document enables a researcher to obtain the language and words of participants, represents data that are thoughtful, in that participants have given attention to compiling Creswell (2003:187). On the other hand, Laws (2002:302) recommended that documentary research is useful when some research questions may be answered by existing data.

3.3.4 Observation

Questionnaires and interview methods rely on self-report by research participants; many individuals can bias the information. Hence the alternative for such bias is to observe the behaviors and the environment being studied. Observational method avoids the inaccuracy and bias of some self-report data (Borge and Falle, 1996).

The researcher used check list for classroom observation and availability of necessary supply of facilities, learning resources and supplementary materials at CRC and member (Satellite) schools to collect the data (Refer to appendices 2, 4).

3.3.5 Questionnaire

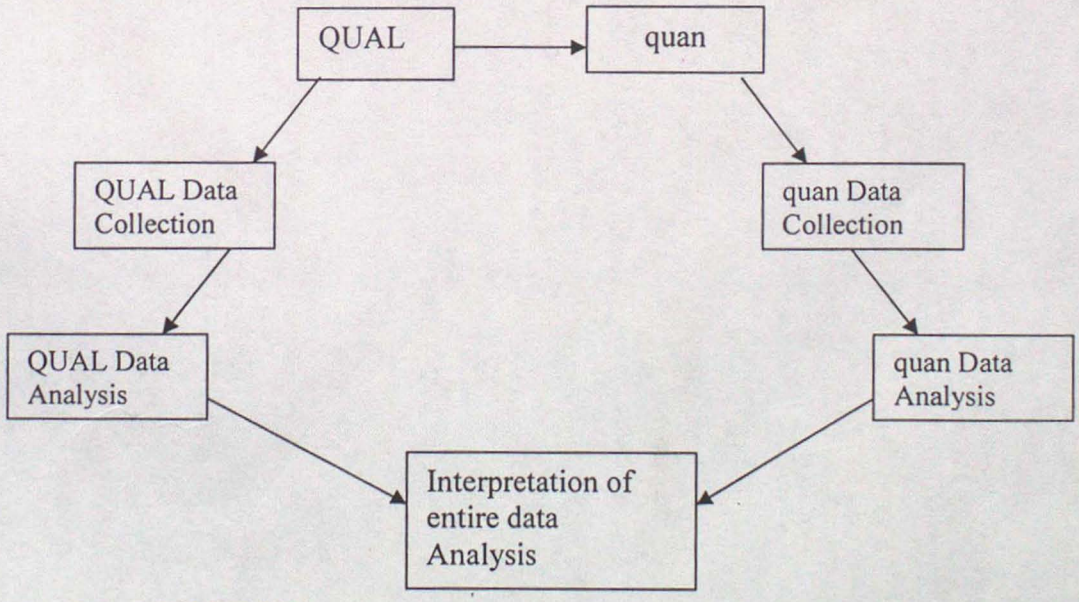
Questionnaire is used extensively in educational research to collect information that is not observed directly. In this study questionnaires would be administered to key teachers, principals and teachers to gather the necessary data. The data collection typically inquires about the feelings, attitudes, accomplishments and experiences of individuals.

The questionnaire was first prepared in English and translated in to Amharic language. It has two sections. The first section was set to collect background information of the respondents. The other section contains closed questions. In the closed ended questions respondents were offered a set of answers that closely represent their view. Respondents are presented with a statement and then required to choose a response indicating varying degree of agreement or disagreement. Questionnaires provide the opportunity to gather information from a much larger sample of faculty, staff or students (Sadker and Sadker, 1997:556).

3.4 Method of Data Analysis

Strategies associated with the mixed methods approach, involve collecting and analyzing both forms of data in a single study. The result from one method helps develop or inform the other method (Creswell, 2003:16). In this study the researcher used sequential exploratory procedure among the mixed methods strategies to expand the findings of one method with another method. The analysis began with a qualitative method for exploratory purposes and following up with a quantitative method.

Sequential Exploratory Design (model)



Source: Creswel (2003:213)

Collecting qualitative data first, helps to explore the topic with participants at sites. The greater priority in the analysis is given to the qualitative approach. A priority for one type of data or the

other depends on the interests of the researcher, the audience for the study and what the investigator seeks to emphasize in the study (Creswel, 2003:212). Hence the analysis would be presented in two phases. Phase one qualitative data and analysis, and phase two quantitative data and analysis. Based on the type of the instrument employed and the nature of questions set narration, direct interpretations and the percentage were used for analysis of data. Direct interpretation explains the data presented in the interview, document analysis, focus group, and class observation. Percentage was used to explain personal characteristics of respondents and the data in the questionnaire.

For the sake of convenience, the rating form was presented with three point scale, "yes, no, undecided;" "frequently, not at all, occasionally;" "good, fair, poor;" "highly improved, some what improved, not improved;" and "low, medium, high". On the other hand two types of checklist were prepared. The checklists are, for classroom observation and availability of materials.

The scales used for classroom observation are two types. These are "yes, no, undecided" for classroom condition and "very adequate, adequate, average, inadequate and very inadequate" for lesson planning, communicating the lesson, implementing the subject matter, instructional materials/ resources, and evaluation (refer to appendix 2). The scales used for availability of necessary teaching and supplementary materials are "yes, no and Qt. If 'yes' " (refer to appendix 4).

3.5 Pilot Study

One cluster resource center and two satellite schools were selected from Lideta sub-city for pre-test of the questionnaires. Then questionnaires were distributed for thirty teachers to check language clarity and appropriateness of items in the content. The questionnaire which was first prepared in Amharic to be filled by respondents was translated into English language for the actual study.

CHAPTR FOUR

4. Presentation and Analysis of Data

This chapter has mainly two parts. The first one is characteristics of informants and the second one is data analysis. In the second part there are two phases. These are qualitative and quantitative data analysis. At the end the two phases would be integrated for interpretation and analysis.

4.1 Characteristics of Respondents

The major categories of respondents involved in this study are seven, namely; principals, staff development facilitators (SDF's), focal persons, representative for CRC, students, key teachers and teachers.

The researcher believes that, the respondents have direct relationship with the matters under study and as a result they were considered to be relevant as main source of information for the study.

At the first phase of the researcher's study, semi structured interview was conducted with six principals. Four staff development facilitators were informants during CRC contact by the researcher where document and material checking took place. Again two focal persons and representative for CRC, were contacted to be interviewed. Next, focus group discussion was carried out with student of four different cluster schools resource centers. Again there was class observation that took place at CRC's level. In the second phase, questionnaires were administered to 183 respondents. By and large 143 questionnaires were administered to teachers. Questionnaires were also distributed to 18 principals and 20 key teachers. The number of the returned copies was 151 (82.5%). Among the returned copies 120 (79.5%) were from teachers, 14 (9.3%) from principals, and 17 (11.2%) from key teachers. The returned copies were found to be enough to draw inferences for the study.

Table 3: Respondents Background Information

General Background		Teachers		Key teachers		SDF		Principals		Focal persons		Total	
		No	%	No	%	No	%	No	%	No	%	No	%
Sex	Male	74	61.7	9	52.9	2	50	11	78.6	2	66.7	98	62
	Female	46	38.3	8	47.1	2	50	3	21.4	1	33.3	60	38
Educational background	12	2	1.7	-	-	-	-	-	-	-	-	2	1.3
	12+TTI	48	40	6	35.3	3	75	2	14.3	-	-	59	37.3
	12+Diploma	63	52.5	9	52.9	1	25	11	78.6	-	-	84	53.2
	BA/BSC & >	7	5.8	2	11.8	-	-	1	7.1	3	100	13	8.2
Work experience in teaching (in years)	1-5	44	36.7	6	35.3	-	-	-	-	-	-	50	31.6
	6-10	17	14.2	3	17.6	-	-	2	14.3	-	-	22	13.9
	11-15	8	6.7	3	17.6	1	25	2	14.3		-	14	8.9
	16-20	15	12.5	1	5.9	1	25	1	7.1	-		18	11.4
	21-25	11	9.1	1	5.9	1	25	2	14.3	-	33.3	16	10.1
	>26	25	20.8	3	17.6	1	25	7	50	-	66.7	38	24.1
Number of service in years in recent schools	1-2	33	27.5	6	35.3	-	-	1	7.1	-	-	40	25.8
	3-4	27	22.5	2	11.8	-	-	5	35.7	-	-	34	21.9
	>5	60	50	9	52.9	-	-	8	57.2	-	-	81	52.3
Teaching load per week	10-15	8	6.8	5	29.4	-	-	3	75	-	-	16	11.5
	16-20	27	22.9	2	11.8	-	-	-	-	-	-	29	20.9
	21-25	53	44.9	6	35.3	-	-	1	25	-	-	60	43.2
	26-30	23	19.5	2	11.8	-	-	-	-	-	-	25	18
	>30	7	5.9	2	11.8	-	-	-	-	-	-	9	6.4
Grade taught in cycle	1st cycle	53	44.2	10	62.5	-	-	-	-	-	-	63	46.3
	2nd cycle	67	55.8	6	37.5	-	-	-	-	-	-	73	53.7
Observed distance from CRC in km.	0-1	71	62.8	14	82.4	-	-	11	84.6	-	-	96	67.1
	2-3	36	31.9	3	17.6	-	-	2	15.4	-	-	41	28.7
	4-5	6	5.3	-	-	-	-		-	-	-	6	4.2

N.B. Informants:

1. **Member of AED/BESO II training team at MOE**
2. **Representative of cluster unit at KCTE**

The general characteristics of respondents were analyzed. Regarding the sex of respondents 98 (62%) of them are males where as 60 (38%) of them are females. This shows that the participation of women was low. The number of female key teachers is 8 (47.1), where as the number of male key teachers is 9 (52.9%). This shows that there was almost a balance in sex. Male principals are 11 (78.6%) and female principals are 3 (21.4%). This shows that the participation of female principals was low. Concerning staff development facilitators, both females and males were found to have equal number of participants.

In terms of educational background, the majority of respondents 84 (53.2%) have qualification of diploma. Other 59 (37.3%) have TEI certificate. Again 13 (8.2%) were B.A and above. In addition, 2 (1.3%) have completed grade 12. This shows that most of the respondents (98.7%) are qualified and fit to teach in primary school. On the other hand the data analysis reflected that there was no problem of teachers who are not qualified.

In case of work experience 50 (31.6%) of the respondents fall below 6 years. The other 22 (13.9%) are in the service category of 6-10. Again 14 (8.9%) were 16-20. The other 16 (10.1%) and 38 (24.1%) were in the category of 21-25 and above 26 respectively. This shows that the majority of teachers have served for many years in the school.

Most of the respondents 34 (21.9%), 81 (52.3%) have service of 3-4 and above 5 years in the schools they are engaged recently. This shows that the respondents have experience in CRC activities and can give relevant information for the study.

As to the respondents teaching load, 16 (11.5%) have periods below 15, and 29 (20.9%) of them have 16-20. Besides 60 (43.2%) of them were found to teach 21-25 periods and 34 (24.2%) have a load 26-30 per week. Few of them, 5.9% teachers and 11.8% key teachers have above 30 periods per week. This shows that most of the respondents have time to participate in CRC activities.

With respect to grade taught in cycle, respondents 63 (46.3%) were found to teach in the 1st cycle and 73 (53.7%) in the 2nd cycle of primary school. This shows that the study encompasses informants of both 1st and 2nd cycle of primary school teachers which are beneficiaries of the innovation.

With respect to distance of clustered schools from CRC, respondents 96 (67.1%) reported that the distance between the satellite schools and CRC was from 0-1 km. Others 41 (28.7%) expressed that the distance was about 2-3 km. This shows that the neighboring satellite schools with no significant distance from the CRC could reach the center easily and work collaboratively.

4.2 Qualitative and Quantitative Data Analysis

4.2.1 Qualitative Data Analysis

In qualitative data analysis interview conducted with principals and officials, document analysis carried out at CRC's, focus group discussion with 2nd cycle primary school students, and class observation at five different classes in the CRC's will be discussed to analyze the practice of cluster schools in implementing primary school curriculum. Again in this part of the study dropouts and pass rate of students is collected from document to discuss and analyze the practice of clustering schools in implementing CRC innovation.

4.2.1.1 Interview Analysis

Structure and Activity of CRC at Cluster Primary School Level

In order to answer the basic question, how clustered schools implement CRC innovation, the researcher conducted interview with principals (Refer to appendix 3).

The respondents viewed the organization of CRC as follows

Respondent Cluster Resource Center Principal viewed the practice of CRC based on structure, activity and collaborative work. He said:

> "The principal of CRC is the chair man of the committee. One of the member school principal is assigned as vice chair man. The other would be a casher. The staff development facilitator of CRC is secretary and representative for technical affaires. The remaining are members. CRC's are structured according to the guidelines of cluster schools"

The answer given by the principal shows that CRC's at cluster school level have organ and structure.

The respondent mentioned about collaborative work

> "Satellite school teachers didn't come to the CRC for experience sharing. The only users of CRC have become the teachers of CRC School. Things were not found to be done according to the documented agreement."

The response shows that satellite schools are not working cooperatively at the cluster resource center.

The view of the respondent on CRC practices

> "CRC activity needs commitment. I could not say CRC would be effective unless and otherwise schools work collaboratively; unless different echelons of education centers pay attention, unless every professional is committed to the activities of CRC. The CRC had been center of excellence if teachers would have used the center as a workshop. This in turn would have paved a way for quality of education. Some teachers were found to evaluate textbooks and supplementary materials at the result of training at CRC. This was a good beginning."

The respondent's reflection shows that evaluation of text books and supplementary materials have been started at cluster schools.

> "We get new information from CRC. The materials sent by AED/BESO were essential and related to the curriculum content. The materials that were sent to our CRC cost in thousands, but we didn't use it. Our supporters have fulfilled our CRC with the materials we didn't have. Workshop chairs and tables, filling cabinets and other useful materials are in use in our CRC."

The response shows that CRC's are equipped with the necessary materials.

14/05/07

Respondent Cluster Resource Center Vice Principal described the benefit and effectiveness of CRC. He said:

> "Schools benefit from CRC. CRC distributes learning materials, stationeries, books, supplementary materials etc. to member (satellite) schools. It is also a center of training. Clustered schools could share and utilize scarce materials like duplicating machine. There are also reference books in the CRC that could be used by the teachers of clustered schools."

The answer given by the respondent shows materials are distributed from cluster resource center to satellite schools. The centers give service of scarce materials to member schools.

> "Resources of CRC are important to facilitate learning. CRC helped us to share duplicating and typing machines during exam period. The trainings which were given helped teachers to develop their professional capacity. Students have improved their participation in the class at the result of the teachers' professional training at CRC."

This shows that cluster schools innovation benefited the students and the school community at large.

The respondent reflected on the practice of CRC

> "CRC is effective in developing experience sharing. The training given at CRC is very good. Trainings such as continuous assessment, students centered approach;

action research, teaching in a large classroom, etc. have helped teachers to improve their teaching method in the classroom. The training has become an input for better application in the teaching learning process. The improvement seen in students' activity and performance in the classroom is the result of teachers' professional development through training."

The response shows that the training given at training centers has improved teachers professional capacity and the teaching learning process in the classroom.

27/04/07

Respondent Satellite School Principal elaborated about CRC organization, teachers' participation and scarcity of materials. The respondent in her words said:

"There is different school type with different management in CRC. The types of schools that are clustered are different. Government, private, public and religious schools are members of the CRC. Since the schools are organized differently, management of the schools differs from each other."

The reflection of the respondent shows that different school types lack collaborative work.

The respondent view on member schools practices

"The advantaged schools lack cooperation. Some private schools didn't want to participate at CRC. They taught, they had all the necessary learning materials. These schools considered their attendance in CRC as wastage of time, labour and money."

The report shows that some advantaged private schools are not willing to work with disadvantaged schools.

"No one takes the risk. Public schools didn't have extra teachers as that of Governmental schools. No body covers the teachers' task in his/her absence. The students should not be left alone. The management of the school is accounted for classrooms with no teachers. For this reason collaborative work at CRC did not work as it was expected."

The given response shows that some public schools are not in a position to send teachers to CRC for collaborative work.

The respondent expressed that schools lack material resources

"Our school didn't use the materials sent by AED/BESO as it is needed. The materials like duplicating machine serve only the cluster resource center school. The quantity of supplementary materials, modules, stationary materials that is dispatched from CRC to the member schools was not enough. We wish if we had more."

The reflection of the respondent shows that there were scarce materials at some school.

09/05/07

Respondent Satellite School Vice Principal explained problem of Working collaboratively in CRC.

> "Although we have knowledge about the importance of sharing experience, conditions didn't make our participation possible. Teachers didn't have interest. They were not volunteer to go to CRC in their spare time. They said that they should be paid for any engagement out of the school in their leisure time."

The response shows that teachers were looking for payment for any engagement at CRC.

The respondent reflected that every school should be equipped with necessary materials

> Let every school be equipped with the necessary materials. Teachers of our school didn't practice preparing teaching aids (materials) in collaboration with other member schools teachers. Without the provision of necessary materials there could not be collaborative work. AED/BESO should support clustered schools, by recruiting a skilled person that could work at CRC. In my opinion, moving from satellite school to the center in search of learning materials or for action of collaborative work creates wastage of education. To avoid this, every school should be equipped with adequate learning materials and skilled person within its territory."

The report shows that moving from one school to the other in search of materials has a negative influence in the teaching learning process.

The respondent pointed that CRC could not be a reality without control and follow up

> "A need for common understanding in CRC involvement is timely issue. CRC committee members differ in many aspects. They differ in educational background, belief, experience, etc. Hence we don't have common understanding how things should go. For example: the donated birr one thousand from AED/BESO was not used to enhance teachers' professional development by conducting school based training. The money in some schools is spent for construction. Where as, in other places it is spent for decorating pedagogical centers. I think this action could take us the wrong way. Again, there is no control and follow up from the concerned officials. Hence effectiveness of CRC couldn't be a reality without control and follow up."

The response of the respondent shows that lack of follow-up and monitoring by the concerned officials affect the effective practice of CRC.

On the other hand the respondent reflected that CRC objectives are implemented in his school

> "My school is on the line. In case of my school we used the money for training and materials necessary for our pedagogical center. Our system of training differs from that of others. Teachers are initiated for experience sharing in their respective Departments. Department members are specialized on the same subject matter so that effective communication could take place. They can discuss freely how they could implement their subject matters in the classroom setting."

The reflection of the respondent shows that, CRC innovation helped teachers to work collaboratively at their respective schools.

> "According to the experience of our school, monitoring and follow up after professional training is compulsory. Each Department evaluates its members to the extent to which trainings have been effectively exercised by the teachers in the classroom. Again every Department evaluates textbooks. Supplementary materials and make a sort of improvement before applying it in the classroom setting. Action research is becoming practical in some Departments."

The response given showed that, departments are involved in monitoring and follow-up of the practice of teachers after experience sharing.

Finally, the respondent described that his school was not ready to work collaboratively with member schools

> "We are not ready. We didn't have the experience of working collaboratively with other schools. Evaluation of textbooks and supplementary materials is carried out in isolation. My school is not ready to work collaboratively with other schools. This didn't mean that we are not open for experience sharing. Different education experts of different regions, teachers from the neighboring schools visited our school, especially our pedagogical center. We welcome any one who wanted to share our experience. Our teachers in their respective school work collaboratively for quality of education."

The response of the respondent shows that, some schools need to make use of the innovation at school basis.

23/04/07

Respondent Cluster Resource Center vice Principal reflected his view on follow up and monitoring at CRC.

> "Lack of follow up and monitoring hampers CRC. Our cluster resource center is linked to the focal person in Addis Ababa Education Bureau and the AED/BESO. The CRC is not linked either to Kebele education team or sub-city education Department. Hence CRC lacked attention by the near-by education officers."

The respondent reflection shows that there was no follow-up and monitoring by Kebele education team, sub-city supervisors and Addis Ababa Education Bureau officials. As the informant underlined, lack of provision of supervision hampers the activities of CRC.

27/04/07

Linkage and Support

The researcher had also made an interview with officials of sub cities and Addis Ababa Education Bureau. The respondents viewed the function of CRC as follows.

Representative for CRC at Addis Ababa Education Bureau reflected his view on linkage, structure and activities of CRC.

> "No structure of CRC in Addis Ababa Education Bureau." The respondent reflected: "Neither AED/BESO nor UNICEF support clustered schools have CRC structure in Addis Ababa Education Bureau. There is no chain of responsibility regarding CRC. In case of AED/BESO, there is one focal person assigned to facilitate training program in Addis Ababa Education Bureau. I knew other regions had a strong network regarding clustering schools. Hence their CRC has become productive."

The view of the respondent shows that; Addis Ababa Education Bureau has no organ and structure of CRC at the bureau, sub-city and kebele level. Lack of chain of responsibility affect the practice of CRC innovation in the city.

He further noted on the number of CRC's in Addis Ababa.

> There are 11 CRC's and 51 satellite schools. In the beginning there were 15 CRC's. However in 1997 Eth. Cal. it was decided to limit the number of CRC's into eleven. Four CRC's were reduced because of very few satellite schools they had, and for reasons of avoiding wastage of resources."

"Collaborative work in CRC is not satisfactory

> Teachers are applying participatory method in classroom setting. Again satellite schools under CRC used to compete with each other in different activities. Schools

compete in sport, question and answer etc. CRC's like Leake Adgeh and Birhanih Zare have set common model exam for grade 8 students. This was practical in seven satellite schools. However when I think of CRC as a "mini TTI" I don't see as such attractive activities. Since clustered schools are organized from different school type all did not have the same concern on working collaboratively. For example:- The donated Birr one thousand for every satellite school by AED/BESO was not used for the targeted program except in few schools."

The response shows that some CRC used to share their experiences through different activities. On the other hand the respondents' reflection indicates that most of the satellite schools are not utilizing the given support for teacher professional development program.

The respondent further reflected his view on CRC activities in Addis Ababa. He said:

"As to my knowledge I didn't see any document how and when AED/BESO support CRC's were set up in Addis Ababa. However the number of CRC's was not found to increase, because of limited resources the Bureau had."

"Lack of devotion and commitment of principals' committee is a big problem. Again CRC committee is not as such strong. There are schools who are not utilizing CRC materials. These indicate the problem of good leadership in clustered schools. On the other hand Kotebe College of teachers' education did not have involvement in CRC. KCTE had a part in AED/BESO support program. But it was not found to use it. In other regions teachers education institutions play a big role in strengthening CRC's."

The respondent reflection shows that there was no commitment and devotion from the part of management committee of cluster resource center in practicing CRC innovation.

The respondent further described the relation of supplementary materials to the content of primary school curriculum. He said:

"Supplementary materials are close to the content of the curriculum. Modules, supplementary materials, reference books, subject focused books, etc. that were donated by AED/BESO are close to the content of the curriculum. Teachers and students utilized them. There are training modules, guides, subject focus supplementary materials that could provide additional knowledge to teachers that help them implement content of primary school curriculum."

He further added:

"Recently we bought different kinds of books that cost Birr 110,000 (one hundred ten thousand Birr). It would be dispatched very soon for cluster schools resource center. The books are related to text-books of primary school education."

The response shows that the supplementary materials and subject focus books and references which are provided by AED /BESO II project and Addis Ababa education bureau, supported teachers and students to enhance learning.

The respondent reflected his view to strengthen CRC activities:

> "I suggest, if there could be a change in organization around schools. There should be an organ which is accounted for the activities of CRC. Consistency in leadership should be practical. There should be beneficiaries portfolio's in CRC. Strong CRC net work should be designed."

14/05/07

Reflection of member of BESO training team at MOE

In order to get more information about cluster schools in Addis Ababa the researcher talked to one of AED/BESO officials. The official mentioned that AED/BESO is closely working with Addis Ababa Education Bureau to promote learning in AED/BESO II support cluster schools. According to the statement of the official, at the early beginning there were three impact CRC's (Tsehay Chora, Temenja Yazi, Arbegnoch) in Addis Ababa. These CRC's as compared to other CRC's had many satellite schools under them. These were, taken for granted and other eight CRC's among fifteen CRC's were selected and added. In Addis Ababa City Administration beginning from 2005 there are eleven AED/BESO II support cluster schools. The number of CRC's is limited to eleven because of the ratio distribution Addis Ababa had from the total of 300 CRC's designed by the project for operation through out the country.

The official further stated that officers were assigned at all regions except in City Administrations. According to the information of the official, AED/BESO plays the role of officers in City Administrations.

The official told the researcher that the USAID (BESO I, 1995-2002 and BESO II, 2002-2007) is a program funded by the United States for International Development (USAID) and implemented by the Academy for Educational Development (AED). The official underlined that for over 10 years; the program has been providing outstanding technical expertise throughout the education sector and developing strong teacher support and curriculum materials into all regions of Ethiopia.

The researcher was informed by the official that AED/BESO itself conducts school follow up and support visit once in a year. During the visit the officials discuss with school administration about the strength and weakness of the cluster center and provide site support.

05/06/07

Respondent Focal person of Addis Ababa Education Bureau told the researcher how CRC's are supported in Addis Ababa. He said:

> "CRC's are supported by AED/BESO. AED/BESO provides fund for teachers professional training program; prepare supplementary materials, modules, etc for CRC's; give financial support to equip clustered schools with reference books, language kits, science kits, etc.; equip CRC with furniture, duplicating machine, type writer. Again AED/BESO provides technical support."
>
> "By the support of AED/BESO, we give training for teachers, principals, expertise, education officials' supervisors, Kebele education team leaders, etc. The various training topics provided at the central venue are instructional leadership, communication, continuous assessment, action research, active learning, subject focus training, teaching in a large classroom, civic and Ethical education, gender issue and the like."

The idea reflected from the respondent shows that teachers, principals and other officials develop their professional capacity through experience sharing facilitated by the central venue. The various trainings provided to the beneficiaries would help to improve the practice of teaching learning in the classroom setting.

The respondent further added:

> "There was no regular follow-up around CRC. The supervisor mainly did this job. Lack of devotion was observed in utilizing CRC materials by clustered schools. Private schools, who were part of CRC, complain for not engaged in the training program. However, they didn't send teachers for training upon request. They were not found giving more emphasis for the importance of professional development training at CRC and collaborative work with their neighbor-hood clustered schools."

Respondent Focal Person of Education Bureau further explained the linkage of the bureau with Kotebe College of Education (KCTE).

> "The Bureau and KCTE did not work collaboratively on the matter of clustering schools. The linkage we have on this issue is loose. I knew that KCTE is supported

by AED/BESO to promote in-service professional development program in cluster schools. However, the college was not found to involve in cluster activities."

17/05/07

Regarding the loose linkage between KCTE and Addis Ababa Education Bureau, the researcher had a chance to communicate with representative of cluster unit at Kotebe College of education. The person in charge of cluster unit told the researcher that KCTE was not working collaboratively with Addis Ababa Education Bureau and AED/BESO II support schools in the city. The representative further mentioned that KCTE, beginning from March 2007 was trying to work with five selected primary schools in the city (Minilik, Karalo, Wondirad, Misrak Goh and Kokebe Tsibah). He also described that KCTE has given training for 150 teachers of the selected schools. The training was conducted for five days on the topics; active learning, continuous assessment and action research. He further added that KCTE has a plan to work collaboratively with these schools by the next year.

The response of both respondents (focal person of education bureau and cluster unit representative at KCTE), show that the education bureau and Kotebe College of Teacher Education are not working collaboratively to support cluster school in Addis Ababa. Further more, the report implies that the absence of CRC structure at the bureau level might have created loose linkage with KCTE, which at the result cluster school in the city could not get support form training centers.

In the process of cluster school practices, cooperation between all persons who are to be involved with program must occur if a change is to be successful and to become institutionalized. According to the view of the respondents (principals & officials) cooperation among clustered schools did not seem to appear. Lack of frequent discussion about CRC among cluster committee members is likely to hamper the implementation of the innovation. As Derbessa (2004) noted opportunities for teachers to work together, share ideas, jointly solve problems and cooperatively creating materials greatly enhance the probability of successful curriculum implementation.

As it is stated in the policy MOE (2002), by clustering schools at a given locality, resource centers provide educational equipment, reference books, etc. in order to enhance teachers' capability in classroom instruction. In this regard as it is also witnessed by principals and officials, CRC's in Addis Ababa were found to provide teaching materials and scarce materials

where most of non-BESO supports schools lack it. This shows that AED/BESO support have impact on the improvement of the teaching learning process.

One of the objectives of clustering school is to redress any imbalance in education by grouping schools that are located near each other in to a cluster, mixing strong school and disadvantaged school in such a way that the latter benefit from the advantage of the former. However, according to the response of the participants (principals and officials) of the study, the advantaged groups were found to counteract the objectives of CRC. According to the reflection of the respondent most of the private schools which were part of the cluster group were not seen willing to share their experiences, materials, etc. with other types of schools. However, documents showed that the innovation of clustering schools were practical and advantageous in other countries e.g. Bangladesh, Namibia, America (Kebede Nemomsa., 2006).

The respondents indicated that improvement in learning was observed at the result of teachers' professional training. This shows that by clustering around cluster resource centers, teachers could get on the job training; exchange experiences by learning from each other, borrow reference books which in turn become an input to implement the curriculum in the classroom setting.

All the interview participants irrespective of collaborative work of clustered schools have marked that teachers of AED/BESO support cluster schools had the opportunity to share their experience in different areas of training either in central venue or at their respective schools. This shows that teachers at clustered schools had a better exposure to modern approach of teaching than other (non-clustered) schools.

4.2.1.2 Document Analysis

The researcher contacted cluster resource centers to probe documents related to CRC activity in different times. SDF's of the CRC's were the participant of the study for they have given information about the activities of CRC upon request.

No	Name of CRC	Date of contact	Sub-city
1	BCRC	16/04/07	Bole
2	ACRC	19/04/07	Yeka
3	TCRC	23/04/07	Kirkos
4	LCRC	23/04/07	Nifas Silk Lafto

As it was learned from the document the BCRC organized different kinds of committee. These were Question and Answer committee, Training Committee, Women Teachers Committee, Sports Committee and Study team. The implementation period and the person responsible for the task was written, signed and documented. The outcome of the activities was also registered and listed on a paper. The document reveals that cluster resorce centers are centers where satellite schools share their experiences and get ready for collaborative work.

Training program:- This was effective in 1999 (2007). Two member schools among the four in the CRC (Birhanih Zare and Misrak Dil) were able to implement professional development training program at their respective schools by inviting sub-city officials.

The topics of training were participatory approach, action research and continuous assessment. The training was conducted for one day. Materials were distributed for participants of the workshop. As it is learned from the document, and the words of the SDF there were 23 staff members who didn't attend the experience sharing. How ever they were able to take the training one hour a day for four days after 3:30 in the afternoon. The fund to implement the program was donated by AED/BESO.

The experiences of the two satellite schools show that schools could arrange and implement teachers' professional training program at their respective schools.

Women teachers committee:- The committee was organized from members of all satellite schools. The women's committee is active. There are different kinds of supportive materials provided by AED/BESO to women's committee.

Sport's committee: competition among the 4 members of CRC was effective in 1997 (2005). Because of lack of budget it was not practical in the year 1999 (2007).

Study team: It has two phases. The principals' and volunteer teachers study groups. Because of constraint of time both were not practical.

Strengthening CRC with materials: The CRC is well furnished and strengthened by the materials donated by USAID. Workshop chairs and tables, computers, filling cabinet, etc were in use at the CRC.

The CRC activity at Birhanih Zare CRC shows that different committee's were organized to play their part. However the activities of the committee were not found consistent. Although the handling of the document was proper, what was planned on the paper was not found to be practical. However sharing of experience that took place in the CRC was satisfactory.

The other CRC's compared to Birhanih Zare CRC lack systematic handling of document. Documents in these CRC's do not reflect the strength or weakness of the clustering activity. On the other hand documents in these CRC's show the activities of teacher in the center school. However all CRC's, tried to organize different committee's, although they were not found to function accordingly.

The above information reflects that satellite schools teachers didn't use CRC. Again the activities of the committee organized in the center were not found effective and sustainable. This shows that CRC's and satellite school lacked follow up and monitoring from the concerned Kebele education team, sub-city education department and Education Bureau supervisors. Lack of follow up and monitoring is likely to have an impact on the effectiveness of CRC.

Availability of Necessary Teaching and Supplementary Materials in CRC

As it is learned by the researcher from the check list, all cluster centers were found to have most of the teaching and supplementary materials provided by AED/BESO and Addis Ababa Education Bureau.

Availability of Materials

- Supplementary readers to enhance reading and comprehension skills for grade level KG-2 to Grade 9 were displayed for users in two CRC's Birhanih Zare and Abyot CRC's. These materials were not available in the other two CRC's (Leake Adgeh and Temanja Yazi CRC's).

- Supplementary books related to environmental education, HIV/AIDS, posters, Teachers Module, Gender issue, participatory approach, teaching in a large classroom, sample activity learning activities, continuous assessment, HIV/AIDS manuals for teachers, etc. were available in three CRC's except in Temenja Yazi CRC. The CRC in Temenja Yazi

CRC did not have even the list of the materials. As to the information of the researcher, the materials were kept in the store of the school and then sent to the library.

- Books related to different subject matters (civic, environmental education, science, English, study skills, gender issues etc.) for different grade levels were available in all CRC, except in Temenja Yazi CRC. (As the research informed latter because of lack of space at Temenja Yazi CRC the materials directly handed over to the library through the store of the school).

It is observed that support materials (books, modules, etc.) were available in most of the CRC's. However, the available materials were not placed and displayed so that teachers could see and utilize it. This shows that the handling and utilization of learning materials need adjustment.

Adequacy of Materials at CRC's

As it was learned from the check list

- There are good quantities of materials in Birhanih Zare CRC as compared to other CRC's. Ten to sixty copies from each supplementary material was observed in the CRC.
- In Leake Adgeh CRC eight to sixteen copies of each material were observed.
- In Abyot CRC five to twenty copies of each material were observed in the CRC.

Birhanih Zare CRC: in this school, teaching and supplementary materials were registered and filed. It was easy to check and refer to the materials. In this school there was a document that shows the list of learning materials sent from AED/BESO to Birhanih Zare CRC and a list that shows distribution of materials from the center to the member (satellite) schools.

Leake Adgeh CRC: Materials were listed and filed. It was easily referred by the teachers in the CRC. There was also a list that shows the distribution of materials to its member schools.

Abyot CRC: Supplementary materials were not properly listed and documented so that it could not be easily referred to the quantity of each material.

Temenja Yazi CRC: No document was found that shows the list of materials in the CRC and distribution of materials to other satellite schools except documents related to guidance of CRC, minutes, files, etc.

As it was observed, two CRC's (Birhanih Zare CRC and Leake Adgeh CRC) differ in their internal organization than the other two CRC's under study. These CRC's, by the support made from AED/BESO, were found to equip themselves with workshop chairs (60), Workshop tables (30), chalk boards, white board, filing cabinet, storing, etc. These could help them to extend their service not only for the clustered schools but also for other schools in their respective area. In both CRC's the chairs and tables were displayed for users. The information gathered from the document, and observation made at CRC's reflected that there are sufficient number of materials at the CRC's. However, CRC's materials were not found properly listed and easily checked at some cluster centers. This shows that CRC's materials are not made to be utilized properly by the stakeholders.

The staff development facilitators told the researcher that members (satellite) schools of all CRC's were not found to utilize materials at the center and work collaboratively with the center. Staff development facilitators suggested that there should be awareness creation program on the overall activities of clustered schools resource center in relation to CRC innovation.

Adequacy of Rooms at CRC's

All CRC's lack space. In Birhanih Zare CRC due to the construction of new classrooms the CRC was not found to give service for the beneficiaries for certain months.

In addition to that the CRC served for both clustering activities and pedagogical center of the school. In case of Leake Adgeh CRC the cluster center and pedagogical centers were separated. The problem observed here is that the computers in the CRC were not in use. It was surprising to keep computers in the room that did not give service. The other thing is that the beneficiaries of the CRC were teachers of the same school. Other member schools were not found to utilize the CRC. The room served for office and display room. The CRC and the school use the same store. Properties of CRC are registered and kept under the responsibility of the store keeper of the school.

Abyot CRC had different feature. Teaching and learning materials were not in order in the room. It seemed disorganized. According to the words of the SDF, problem was created, because of the construction of new classroom in the school compound. Here the CRC and pedagogical center are separated. However the CRC room served for office, store and display room.

Compared to the other three Temenja Yazi (Kirkos sub-city) seemed to need adjustment. The room was old. The teaching aids were scattered here and there on the floor. The room served not only as CRC but also as a pedagogical center of the school. No supplementary and reference books were seen in the CRC. No chairs, tables and other materials appeared.

Lack of space, in all CRC's showed that all concerned officials and stakeholders of CRC's were not working cooperatively to end the problem of space.

Sample Centers as to the researcher's observation: (May, 03/2007)

Netsanet Chora, a pedagogical center, at Nifas Silk Lafto has been found sample by its activity of preparing teaching aids from locally available materials. In this center, the researcher observed models of ostrich, skull, newly built classrooms, cobra, terrace farming, natural environment, etc. which were prepared from locally available and unwanted materials (although wanted by the school). The materials used to prepare the models, were from thrown away cartoons, sponge, pieces of papers, wires and the like. However, scarce of shelves, tables, chairs and lack of space was observed in the center. In the same school, the researcher surprisingly observed AED/BESO support materials, stationeries etc. kept in the director's office.

Again the researcher observed at Atse Zerayakob primary school (Nifas-silk Lafto) pedagogical center. Teaching aids prepared for unable to see (special need) students were available in the center. The physical map and Globe could be noted as an example. The teaching aids in this center were well displayed. As it is learned from the coordinator, every day minimum of ten teachers were utilizing teaching aids made in the center. The researcher has checked and proved what was said from the file of teachers at the center. The coordinator in this center who was found productive and rich experience told the researcher that he was willing to share his experience to any interested group. As to the information of the researcher, many visitors from the surrounding and from different regions have come to this school for experience sharing. The coordinator, as he told to the researcher, was the first man to prepare different models from sponge. This person has shared his newly practiced experience to neigbouring and other schools.

As it is viewed by the researcher pedagogical centers found at the satellite schools are well organized than CRC's. CRC's had been the work shop of their respective satellite schools.

However, satellite schools didn't show their skill to make CRC center of excellence. This shows that there is a loose relationship between CRC and satellite schools.

Result of document regarding dropouts and passing rate of students in CRC schools Master sheets that indicate dropouts and pass rate of students within two consecutive years (2005, 2006) in six satellite schools was observed from the documents as follows.

Table 4: Dropouts and Passing Rate of Students in Two Consecutive Years (2005, 2006)

Sub-city	Name of the school	Sex	2005							2006							Remark 2005, 2006	
			Registered	Dropouts		Detainee		Pass		Registered	Dropouts		Detainee		Pass			
				No	%	No	%	No	%		No	%	No	%	No	%	Dro.	PR
Bole	Birhanih Zare (1-8)	Male	903	33	3.7	98	11.3	772	88.7	718	39	5.4	65	9.6	615	90.4	x	✓
		Female	1502	63	4.2	153	10.6	1286	89.4	1321	37	2.8	93	7.2	1190	92.8	✓	✓
		Total	2405	96	4	251	10.9	2058	89.1	2039	76	3.7	158	8	1805	92	✓	✓
Nifas Silk Lafto	Netsanet Chora (1-8)	Male	787	43	5.5	30	4	714	96	742	41	5.5	14	2	687	98	NC	✓
		Female	875	40	4.6	32	3.8	803	96.1	846	36	4.3	9	1.1	801	98.9	✓	✓
		Total	1662	83	4.9	62	3.9	1517	96	1588	77	4.8	23	1.5	1488	98.5	✓	✓
Yeka	Abyot (1-8)	Male	644	15	2.3	29	4.6	600	95.3	676	21	3.1	24	3.7	631	96.3	x	✓
		Female	826	19	2.3	32	3.9	775	96	796	28	3.5	23	3	745	97	x	✓
		Total	1470	34	2.3	61	4.2	1375	95.7	1472	49	3.3	47	3.3	1376	96.7	x	✓
Kirkos	Temenja Yazi (1-8)	Male	657	60	9.1	20	3.4	577	96.6	563	30	5.3	32	6	501	94	✓	x
		Female	1104	80	7.2	25	2.4	999	97.5	956	67	7	50	5.6	839	94.4	✓	x
		Total	1761	140	8	45	2.7	1576	97.2	1519	97	6.4	82	5.8	1340	94.2	✓	x
Bole	Misrak Dil (1-8)	Male	589	11	1.8	25	4.3	553	95.6	531	16	3	14	2.7	501	97.3	x	✓
		Female	710	18	2.5	31	4.5	661	95.5	590	23	3.9	21	3.7	546	96.2	x	✓
		Total	1299	29	2.2	56	4.4	1214	95.6	1121	39	3.5	35	3.2	1047	96.8	x	✓
Kirkos	Netsanet Birhan	Male	843	11	1.3	48	5.8	784	94.2	819	39	4.8	41	5.3	739	94.7	x	✓
		Female	999	42	4.2	53	5.5	904	94.5	880	33	3.8	39	4.6	809	95.6	✓	✓
		Total	1842	53	2.9	101	5.6	1688	94.4	1700	72	4.2	80	4.9	1548	95.1	x	✓
Total		Male	4423	173	3.9	250	6.3	4000	94.1	4049	186	4.6	190	4.9	3674	95.1	x	✓
		Female	6016	262	4.4	326	5.7	5428	94.3	5389	224	4.2	235	4.5	4930	95.5	✓	✓
		Total	10439	435	4.2	576	5.8	9428	94.2	9448	410	4.3	425	4.7	8604	95.3	x	✓

Key: Dro = Dropouts P.R = Pass Rate ✓Improved X = Not improved N.C = No Change

The above table shows the dropouts, detainee and pass of students in six schools. As it is shown in the table, in the majority of the schools (83.3%) the percentage of pass students is found to increase from the year 2005 to 2006. This shows that the percentage of detainee students is decreasing.

On the other hand, as table four shows, the rate of dropout students was not improving. In 2006, as compared to 2005, male dropouts were found to increase and female dropouts to decrease. As the table describes, male dropouts in 2005 were 3.9% where as in the following year, it increased by 0.7%. As to the female dropouts it decreased from 4.4% in 2005 to 4.2% in 2006 the passing rate. The passing rate of female students was found better than that of male students. When the pass rate of male students improved by 1% the pass rate of female students was found to improve by 1.2%. This indicates that the rate of dropouts and passing rates of students at CRC's was improving year after year.

4.2.1.3 Analysis on Focus Group Discussion

The practice of teaching in the classroom: The researcher had group focus discussion with students. The students were selected from CRC's under study. There were four groups out of which one group was taken from each CRC. Each group consisted of 10 students, five males and five females. All were 2nd cycle (Grade 5-8) students.

The purpose of focus group discussion was to investigate how learning is promoted in the classroom. Based on this, each focus group agreed to discuss about students learning in the classroom. The time allotted for each group discussion was 45 minute.

No	Focus Group	Date of Focus Group Discussion	Sub-City
1	Lafto Focus Group	23/04/07	Nifas Silk Lafto
2	Yeka Focus Group	26/04/07	Yeka
3	Kirkos Focus Group	26/04/07	Kirkos
4	Bole Focus Group	24/04/07	Bole

The focus group members including the chairman introduced themselves to the group. They told their names and their grade level. They were also ready to be recorded.

Focus Group Discussion Proceedings

The researcher acted as a chairman having consent from the group members. The topic "learning in the classroom" was accepted by all groups as a point of discussion. The researcher told the group members that they were given the right to communicate freely with out any reservation. During discussion; supplementing ideas, disagree on the point raised, reflecting new information, etc was possible. The researcher as member of the focus group discussion and a chair-man, could intervene to bring the focus group to the point of discussion.

The result of focus groups reflection is highlighted, summarized and analyzed below.

Lafto Focus Group

The Lafto group discussed about students learning in the classroom and reflected its view. The group statement is presented as follows.

> "Free communication was not developed between us and teachers although little reflection was observed. Teachers did not prepare us to share our experience through group work. Most of the teachers did not motivate us to participate in the class activity by using different methods. Most of the teachers were not prepared to promote active learning in the classroom."

The group reflected: - **Lecture method takes the upper hand**

> "Our teachers mostly used lecture method. They didn't give attention for group work. Although there were some teachers who used student centered approach, it was not satisfactory and inviting. Hence we could not say active learning is promoted, because we were not made to participate in the teaching learning process."

The group raised different issues based on student learning as follows

> "Some teachers were not motivating students to participate in class discussion. Instead they put blame on students who didn't give the right answer. Hence students who were neglected did not try to give answer there after."
>
> "We believe that student centered approach would improve learning. But teachers did not use it properly. The only textbook that leads students for group discussion is civic and ethical education. Other texts were not prepared to promote active learning in the class."
>
> "Students discipline was not good. They did not do assignment. Some teachers did not have control over them. Students didn't have interest to share their experience by involving in the group discussion. They laughed at those who took part in the

> discussion. In some classes group work is given, but it is done only by the group leader. We reported for teachers, but they didn't give solution

Lafto focus group reflected that there was no free discussion on matters related to the teaching learning process. In addition students were not given opportunity to take part in group discussion. Again the group reported that some teachers did not pay attention for student participation in the class, where as they prefer to focus on lecture method. The focus group believed that students would improve their skill through participatory method. On the other hand the group depicted that students discipline affected the class climate. Generally, reflection of Lafto focus group shows that teachers need further professional training on active learning.

Yeka Focus Group

> "Students are evaluated by class activity, group work and homework. Good conduct deserved marks. Teachers give ten marks for class activity. Continuous assessment support students. When it was first started we didn't need it. We taught it was not good. However we found it useful."
>
> "Most of the teachers did not use teaching aid. They didn't have much information about it. There is no laboratory in our school. The library is not organized too."
>
> "We are pleased if teachers would correct our class work and homework. Giving correction depends on the teachers. Most of the teachers give homework but they didn't give correction."

Free communication

> "Women participation in the class has increased. They communicated in their group better than males. Group work has helped us to communicate with our colleagues. We debate with teachers without fear. We have practiced to communicate freely."
>
> "Most of the teachers motivated students to participate in the class discussion. They helped the group. Teachers were taking action on those who didn't do their job. Teachers used to give supplementary information after group discussion."

The Yeka focus group reflected that teachers promoted active learning in the classroom. Again the group said that continuous assessment was applied by the teachers. Furthermore the group manifested that students enjoyed free communication. In addition, the group reported that women participation was found to increase. On the other hand, most of the teachers motivate students to participate in the class discussion. The Yeka focus group discussion shows that cluster primary school teachers practice CRC innovation at their respective classrooms.

Kirkos Focus Group

Students participate

> "Some teachers spent the period by writing on the blackboard. Others tell us to copy note from our textbook. Still others used to lecture the whole period. These teachers did not give chance for students to take part in the teaching learning process."
>
> "There are some teachers who raised certain lesson topics to be discussed by students. Students liked to participate in such discussion. Traffic problem on the road, HIV/AIDS issues, other topics related to the respective lesson were given to students to be discussed in a group."

Continuous assessment

> "Mostly students' participation was seen in civic and ethical education period. Students deserved grade for their participation. Homework and class work up to 10%, class activity from 10 to 20%, group work from 10 to 20% is recorded on the mark list. There are also teachers who used to give two or three marks for every class work and homework done by the students."
>
> "There are some students who didn't give respect for group work. They laughed at students' participation during discussion. Hence participant students would refrain from giving their idea freely. Some teachers tried to smooth the problem, and others who didn't have patience walked out of the classroom."

Students reaction

> "Some teachers did not have the culture of solving the problem of students. Because their attachment to their students is loose. They didn't listen to their students."
>
> "Mathematics teachers used teaching aids when they taught Geometry."
>
> "We didn't have laboratory. Hence science subjects are presented only in theory"

Fairness in teaching

> "Some teachers discriminate students in their teaching. For example:- There was a teacher who taught other section being helped by teaching aid. When he came to the other section of the same grade level, he left the teaching aid. The teacher some times selected few students and took them to the section where he applied the teaching aid. The teacher took the step because of the conflict he had with a student in the discriminated class"

The group reported that some teachers didn't use student centered approach. As it is reflected by the group, continuous assessment was practiced by teachers. However, some students were found

to counteract the participation of students in the classroom. The focus group mentioned that the school lacks laboratory and well equipped library. On the other hand the group complained on some teachers who discriminated students. The focus group reflection shows that most of the teachers are engaged in practicing CRC innovation, where as some teachers need to participate in experience sharing on topics of active learning and continuous assessment.

Bole Focus Group

Learning by Doing

> "The system of teaching and learning is changed. This time students are not expecting every piece of information from their teacher. They do by themselves. Students share their experience; based on the topic they are given. They discuss in group. They ask each other. They read books. They seek information from different areas. Every student works hard for his group to deserve a better grade."

Sitting arrangement fitted group discussion

> "This time our seating arrangement is changed. We sit in group in the class. Sitting in a group can help to identify students easily. Group leaders check the activities of the students and report to the subject teachers. There are different groups in different subjects. Some teachers group students according to their seating arrangement. Others use attendance sheet."

Participation

> "In the past, very few and known students were the actors in the class. Teachers paid attention to these students. This was not a good approach. Now, teachers are found to motivate weak students to answer question, and make them participate actively in their group. They used to appreciate students who didn't give the right answer. Now the whole class is taking part in the process of learning."

Application of Group work

"All teachers give us group work at the same time. When we are loaded with different kinds of group work we didn't get time to study our note and do assignments. Meanwhile each teacher wants his assignment to be done in the given period of time. Group work is found to take our time."

"We contribute money to group work. Because the information we gathered should be typed. However it is difficult to collect money for all group work given by all subject teachers. This had been a big problem for months. Recently we reported the case to the office and we have started to write using pen."

Reward for good performance

"There are teachers who could be exemplary in their profession. They should be rewarded. We didn't see teachers who were given reward for their good performance in our school. Unless teachers are motivated, good teaching could not take place in the classroom. Hence rewarding teachers for good performance should be practiced.

Learning in the Classroom

"Most of the teachers use teaching aid to support the lesson they taught. Students are also participated in doing teaching aids. However some subjects like chemistry and social studies are not supported by teaching aids.

"Some teachers didn't treat students in a good way. They showed angry face. They frowned at students. The students did not like such personality. Hence they didn't give good regard for these teachers as well as for the subject they taught.

"Some good teachers did not neglect students' question. When they didn't know the answer they told their students they would bring the following period."

"Before this time there was only monthly test or weekly test. Nowadays participating in the group work would deserve a mark. Class activity has been given credit. Now our grade was found to increase."

The focus group reflection shows that practice of clustering school innovation has enabled students not to expect every thing from teachers. This indicates that students have started to find solutions for problems by discussing in group, reading supplementary materials and seek piece of information from different learning areas. On the other hand the sitting arrangement in the class enabled students to interact with their fellow students and teachers. This shows that the CRC innovation has increased participatory learning through application of group work. Again, the reflection of the focus group depicts that, the teaching learning process is supported by teaching aids so that the students could easily develop their experiences. In addition, the focus group indicated that the application of continuous assessment in the classroom helped them not only to participate actively in the class but also to improve their grade.

4.2.1.4 Analysis on Classroom Observation

The researcher observed five classes at four different places in different CRC.

No	School	Class observed	Subject	Period	Time	Date
1	Leake Adgeh	1A	English	6th	1:30-2:10 PM	April 19, 22, 23/2007
2	Abyot	3A	Maths	3rd	10:00-10:45 AM	April, 25, 26, 27/2007
		6A	Science	4th	11:00-11:45 PM	April 25, 26, 27/2007
3	Birhanih Zare	5C	Science	6th	2:00-2:45 PM	April 25,26,27/2007
4	Temenja Yazi	7D	Maths	1st	8:30-9:45 AM	April 07, 08,09/2007

The researcher used classroom observation checklist for every observation session. The purpose of the checklist was to assess the performance of teachers at the result of training at (CRC). There were 34 performance indicators in the checklist. The steps to be followed by the observer were listed on the checklist.

a. Classroom Condition

In all the observed classes there was adequate space for movement between desks. However the desks and chairs were not easily moveable. The number of students in the classes observed was 53, 62, 63, 32 and 54. The student classroom ratio of the observed schools was 1:53. All day teaching was practical in all the schools. Time fixed for each period was 45 minutes. The classrooms were with enough light. This shows that the classroom condition is comfortable for the teaching learning process in the class at clustered schools.

b. Lesson Planning

In the 2nd cycle classes of all schools teachers weekly lesson plan didn't match to their annual plan. The topic that should have to be presented in the month of May was found to be taught in April. There was a difference of one month. It was observed that there was additional load on both the teachers and students because of the census which was made clear after the school year began. Hence teachers were running fast to finish portions of their respective subjects. However the teachers' weekly lesson plan matched to the contents of the subject they taught in the class. Teachers in their weekly lesson plan, formulated goals and objectives to the lesson. Again correspondence of content and learning activities was adequate. This shows that teachers are used to preparing lesson plan which matches the content of the lesson at clustered schools.

c. Communicating the Lesson

There were differences in communicating the lesson. In Berihane Zare Cluster Resource Center primary school the researcher had the chance to observe grade 5C, that is Science class. Students were sitting in group. They were able to face each other. The teacher could easily move from one group to the other group. The lesson presented about simple machine was supported with relevant teaching aid so that it created good teaching and learning environment for students to communicate among themselves and with their teacher. Female students were active participant.

In Abyot Cluster Resource Center primary school the researcher observed Mathematics class in grade 3A. In this class students were found to do their assignment first individually and then in group. The group consisted of 7 to 8 students. The teacher let students to solve problems on the blackboard. Other students observed and commented on the activity of the student. Students

communicated to each other and to their teacher. Every student had his/her Mathematics textbook with him. Female students were taking part in the class activity.

The other class in the same school which was observed was grade 6A Science. In this class the method the teacher used was question and answer. Few and the same students raised their hands to answer questions. The teacher tried to communicate with students by drawing picture of an eye ball on the blackboard. Participation of female students in the class was low. The teacher didn't use variety of methods to engage students in their work.

Grade 1A students at Lacke Adgeh Cluster Resource Center were found in harmony with their teacher. Students repeated words in chorus and individually. Every one was eager to participate in the learning activity. The teacher called students by their names and asked questions. Students associated words with pictures. To teach the words 'big' and 'small' the teacher used stone. The students identified the words by looking at the size of the stones.

The class the researcher observed in Temenga Yazi Cluster Resource Center School was section 7 D, subject Mathematics. The topic of the lesson was "sum of interior angles of polygons". The teacher used lecture method. He explained the lesson while writing note on the blackboard. Students were passive listeners. They didn't participate in the teaching learning process. What the researcher observed in this class was binding rules hanged on the wall, which is indeed attractive for students to easily grasp the principles easily.

Regarding communications of lesson, the classroom observation shows that, most of the CRCs' students were given opportunity to under go active participation in the class. The classroom setting reflects that female students' participation has taken the upper hand.

d. Mastery of the content

Every teacher whom the researcher observed was qualified for the subject he/she taught although there was difference on the ability to utilize (employ) appropriate method of teaching. This shows that teachers assigned to teach were qualified for the subject the taught.

e. Implementing the subject matters

Teachers in Brehanih Zare and Leake Adgeh Cluster Centers primary schools arranged their teaching materials prior to lesson implementation. Students' direct participation in their classes

was good. Students were highly encouraged to take part in discussion and praised for their participation.

Teachers in Abyot CRC and Temenja Yazi CRC primary schools tried to implement their respective subject matters using chalk and blackboard. Especially what was observed in Temenja Yazi CRC was not enthusiastic. Students did not occupy themselves with different activities.

The classroom observation shows that some teachers need follow up to implement active learning in the class.

f. Instructional materials and resource

Cluster school resources were utilized by Berhanhi Zare and Leake Adgeh CRC's primary school teachers. They used appropriate and variety materials to the topic. The teachers' effort to enrich the lesson by using cluster resource center resources and locally available materials was very good, where as in Abyot and Temenja Yazi CRC's primary schools; teachers didn't use any teaching materials. The Science teacher of grade 6A (Abyot CRC) for instance should have used a diagram to show the effect of short sightedness or long sightedness instead of trying to draw picture of an eye ball on the blackboard. Similarly the teacher of grade 7A at Temenja Yazi CRC primary school also should have used real objects or diagram of polygons to promote learning. These teachers didn't try to utilize cluster school resources. The reason the teachers gave for not using teaching aids was shortage of time to cover the portion.

The practice of two CRC's (Birhanih Zare and Leake Adgeh) reflects that committed and devoted teachers use the resources of their pedagogical centers to make their classroom teaching enthusiastic. The teaching methods used make the students easily grasp the lesson.

g. Evaluation

In Birhanih Zare CRC the teacher used a format that could help to assess students' activity and performance. The format was given to the group leader to register and control group members. On the format there were about 7 indicators of activities.

A student in each group was checked for coming without doing homework or class work, and also checked for coming without having exercise book and textbook. In addition, the group leader checked students who were not participating in group discussion. Taking attendance of his group

members and identifying students who were not able to read were the responsibility of the group leader. Students who misbehave were also controlled. The format filled by the group leader was given to the teacher at the end of the week. The students' activity reported by the group leader was taken out of 10%. Another 10% mark was given for class activity and different exercises made by the student on his/her exercise book. On the mark list four fives, which sum up 20% is reserved for continuous assessment. The other 80% is given for tests and final examination.

The practice of the CRC School shows that students were able to share responsibility in evaluating their fellow students.

Continuous assessment exercised in Leake Adgeh CRC School. In grade 1A (first cycle) students were assessed in the following way. Oral 5%, test 10%, quiz 10%, oral 5%, test 10%, quiz 10% and exercise 20%. This sums up 80%. The rest 20% was for final examination. Continuous assessment at Abyot CRC primary school (grade 3A) is marked in codes. For students who had very good participation * (star) was coded. The star represented the student's very good participation, and good ability of reading and writing.

The classroom observation indicates that teachers are using different evaluation mechanism to upgrade the skills of their respective students in the class.

Various codes were used to represent participation.

Such code ▲ represents very good participation, how ever this code differs from star since it is given to a student who is not working his/her assignment because of his/her problem at home. ▼ Represent good participation, however a student coded ▼ usually forget to do his/her assignments, and plays in the class. ■ is coded for average students. **O** For very weak students, **U** for student who behaves properly, **h** for students who are very good in their behavior. However, such students were categorized under **h**, because of liking play and restlessness. **N**, for students who are as **h**, but quarreling some one and disturbers.

The various codes used shows that teachers are using symbols to represent students' participation. Therefore, the system indicates the good practice of continuous assessment.

The evaluation system the researcher observed in Temenja YaziCRC School is no difference from that of the traditional way. The teacher gave 10 to 20% marks for class participation (For

doing homework and class work) tests and final exam counts out of 80%. This shows that some teachers lack training in continuous assessment.

4.2.2 Quantitative Data Analysis

The participants in the data collection are principals, key teachers and teachers.

In order to investigate the exposure of respondents to training centers, they were asked if they had the chance to share their experience in the training centers (Central venue, Sub-city, CRC, School). Following that they were requested at what level they participated. The respondents were given options "yes, no, undecided" from which to decide. The results are summarized below.

Table 5: Contact Cluster Schools Training Centers

No	Items	Principals no. 14						Teachers No. 118						Total No. 132					
		Yes		No		Undecided		Yes		No		Undecided		Yes		No		Undecided	
		No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1	Did you have the chance to share your experience in the training centers?	11	79	2	14	1	7	76	64	41	35	1	1	87	66	43	33	2	1

2	If your response for question 1 is "yes" at what level?	Principals No. 11		Teachers No. 76		Total No. 87	
		Yes	%	Yes	%	Yes	%
	a. at school level	10	91	64	84	74	85
	b. at CRC level	4	36	25	33	29	33
	c. at Addis Ababa Education Bureau level	5	45	12	16	17	20

4.2.2.1 Contact Cluster School Training Centers by Stakeholders

As it is indicated in the above table, the majority of principals and teachers 87(66.6%) have responded that they had the chance to share their experience at training centers. Among the principals and teachers who said "yes" 10 / 91% and 74 / 85% of them respectively have shared their experience at school level, where as some of the same principals and teachers (33% and 20% of the total) who said "yes" had the chance to contact "CRC and central venue (Addis Ababa Education Bureau) training centers. This shows that teachers' in-service professional development training program was not strengthen and promoted at CRC level.

As it is learnt from Addis Ababa Education Bureau, there were key teachers and principals who contacted the central venue training center. The following figure shows number of participants at the central venue 2006/2007.

Category of participants	Number of participant		
	Male	Female	Total
Teachers	529	408	937
Principals	111	44	155
Total	640	652	1092

Source: Addis Ababa city administration education Bureau (2007).

This shows that significant number of teachers and principals were engaged in Addis Ababa Education Bureau training center.

4.2.2.2 Area of Training Shared by Principals, Key Teachers and Teachers

In order to assess the area of training, which the respondents experienced, a number of topics were listed to be decided by the informants. The respondents were provided options "yes, no, undecided," where the finding as follows:

Table 6: Assessment of Training Experience Shared by Stakeholders at CRC/School

No	Topics of training items	Principals and key teachers No. No.=31						Teachers No. 120						Total No. 151					
		Yes		No.		Undecided		Yes		No.		Undecided		Yes		No.		Undecided	
		No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1	Continuous assessment	24	77	6	20	1	3	113	94	5	4	2	2	137	91	11	7	3	2
2	Child centered approach	28	90	3	10	-	-	98	82	16	13	6	5	126	83	19	13	6	4
3	Teaching in a large classroom	20	64	3	10	8	26	71	59	13	11	36	30	91	60	16	11	44	29
4	Civic and ethical education	23	74	6	20	2	6	97	81	8	7	15	12	120	80	14	9	17	11
5	Less plan preparation	26	84	3	10	2	6	108	90	5	4	7	6	134	89	8	5	9	6
6	Acton research	19	61	4	13	8	26	86	72	23	19	11	36	105	69	27	18	19	13
7	Preparation of teaching material from locally available materials	20	64	4	13	7	23	83	69	15	13	22	18	103	68	19	13	29	19
8	Increasing students enrollment and decreasing wastage of education	23	74	4	13	4	13	71	59	20	17	29	24	94	62	24	16	33	22

The stakeholders were asked to answer whether or not they participated in the given topics of training. The majority of the respondents have said 'yes' that they have participated in teachers professional development training. From the listed topics of training 94%, 90% and 82% of teachers agreed that they shared their experience in continuous assessment, lesson plan preparation and student centered approach respectively. On the other hand 77%, 84% and 90% of principals and key teachers indicated in agreement (yes) that they shared the above three topics of training.

Again 81% of teachers and 74% of principals and key teachers reflected that they shared their experience in Civic and Ethical education. Concerning action research 72% of teachers and 61% of principals and key teachers noted that they took part in the training. Again, in case of action research, it is reported that 69% of the total population have taken the training.

In addition, 69% of teachers and 64% of principals and key teachers noted that they have experienced how to prepare teaching materials from locally available materials. Furthermore, 59% of teachers and 64% of principals and key teachers confirmed that they developed their knowledge on the topic, teaching in a large classroom. In addition, concerning increasing students enrollment and decreasing wastage of education the respondents 59% teachers and 74% principals and key teachers have confirmed that they shared ideas on the topic.

The above information indicates that the majority of the respondents have experienced the skills and abilities in the given topics. This was clearly manifested by both groups with no significant difference. This shows that most of the respondents have contacted the training center and enriched their experience in the area of training listed in table 6.

Again 68% of the total respondents agreed that they have shared their experience in preparation of teaching materials from locally available materials. Significant number of respondents (42%) did not agree and decide about the training. This shows that training given on this topic didn't include all teachers.

Most of the respondents (62%) reflected that they shared their experiences regarding increasing enrollment and decrease wastage of education. On the other hand 38% of the respondents did not confirm that they shared their experience on the subject. This shows that significant numbers of teachers' were not made involved in the experience sharing.

On issue of training, it was learnt that there were certain people who come to the central venue multiple times to share their experience more or less on the same topics where as most of the participants did not share their experience to the staff, when they went back to school. This shows that mostly, training of TOT (training of trainers) that took place at the central venue had no multiplying effect as the grass root level.

4.2.2.3 Utilization (Preparation) of Teaching Aids at CRC

Informants of the study were requested how often they utilized and shared their experience at cluster resource centers at the result of the given training. Options (frequently, not at all and occasionally) were given to respondents to decide.

Table 7: Utilization of CRC by Stakeholders

No	Items	Key teachers No. 17						Teachers No. 120						Total No. 137					
		Always		Not at all		Occasionally		Always		Not at all		Occasionally		Always		Not at all		Occasionally	
		No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
a	How often did you:- Utilize teaching aids made at CRC	5	30	6	35	6	35	35	29	66	55	19	16	40	29	72	53	25	18
b	Prepare teaching aids at CRC	3	18	10	59	4	23	27	22	74	62	19	16	30	22	84	61	23	17
c	Evaluate supplementary materials at CRC	1	6	12	71	4	23	19	16	91	76	10	8	20	15	103	75	14	10
d	Utilize reference books provided by CRC	4	24	6	35	7	41	40	33	43	36	37	30	44	32	49	36	44	32

As it is shown in the above table concerning item 'a', 35% of key teachers and 55% of teachers indicated that they have never utilized teaching aids made at CRC, where as 35% of key teachers and 16% teachers noted that they utilized teaching aids made at CRC occasionally. In addition 30% of key teachers and 29% of teachers mentioned that they utilized CRC frequently.

In item 'b' of the same table, 59% key teachers and 62% of teachers indicated that they have never prepared teaching aids at CRC, where as 23% of key teachers and 16% of teachers responded that they prepared teaching aids at CRC occasionally.

In item 'c' respondents were asked how far they exercised evaluating supplementary materials at CRC. In the response given, 71% of key teachers and 76% of teachers have reflected that they have never been engaged in evaluation of support materials.

In addition, the informants were asked to answer item 'd' which seeks information about the utilization of reference books provided by cluster resource center. 41% of key teachers and 30% teachers agreed that they utilized reference books provided by CRC occasionally.

Significant numbers of key teachers 24% and teachers 33% have reported that they utilize reference books always. Among the respondents 35% of key teachers and 36% of teachers mentioned that they have never used reference books provided by CRC.

The table above shows that respondents, were not actively participate in the utilization and preparation of teaching aids at CRC. Again the respondents were found that they were not active in evaluating and utilizing supplementary materials provided by CRC. Generally the response given by respondents in table 7 clearly shows that CRC was not well utilized by the stakeholders and the respondents were not in a position to develop their experience through active participation in CRC.

4.2.2.4 Activities of Satellite Schools in Facilitating and Utilizing CRC Materials

Satellite schools have their own contribution in make use of CRC resources. It is necessary to investigate whether or not satellite schools use scarce materials equally among themselves. The respondents were given options (Yes, No, undecided) to decide.

In the following questions, informants of the study were asked whether or not satellite schools display resource, provide teaching materials, and share scarce materials for beneficiaries.

Table 8: Satellite Schools Activity in Displaying CRC Resources for Utilization

No	Items	Key teachers and principals No. 31						Teachers No. 120						Total No. 151					
		Yes		No		Undecided		Yes		No		Undecided		Yes		No		Undecided	
		No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1	Are supplementary materials and reference books distributed from CRC displayed in clustered (satellite) schools so that teachers can easily get and utilize it?	20	65	11	35	-	-	69	57	50	42	1	1	89	59	61	40	1	1
2	Are posters displayed in members (satellite) schools so that teachers could easily see and utilize it	25	81	6	19	-	-	66	55	54	45	-	-	91	60	60	40	-	-
3	Have you ever been provided with modules or materials that were helpful to develop your profession?	23	74	8	26	-	-	55	46	63	53	1	1	58	38	71	47	1	1
4	Do clustered schools utilize duplicating machine and other scarce materials equally among them selves?	13	42	17	55	1	3	52	43	68	57	-	-	65	43	85	56	1	1

For question item '1' in the above table 65% of key teachers and principals agreed that CRC supplementary materials and reference books are well displayed in satellite schools. On the same issue 57% of teachers confirmed that supplementary and reference materials are well placed in satellite schools. On the other hand, significant number, that is; 35% of principals and key teachers and 42% of teachers reflected that the CRC materials are not well placed in the school.

Concerning item '2' 45% teachers and 19% key teachers and principals have confirmed that posters sent through CRC were not well displayed or pasted, in the school so that teachers could see them and develop their awareness. On the contrary, 81% of key teachers and 55% of teachers agree that posters were well displayed for teachers to utilize them properly.

According to the information given above the majority respondents agreed that the materials provided by AED/BESO were displayed so that the stakeholders could easily utilize it. Hence the responses of the participants show that most of the satellite schools actively utilize CRC resources. Howe ever, the significant number (42% teachers) did not agree on the above opinion. This shows that some satellite schools do not display support materials and posters to the staff.

For question item '3' respondents differ in their response. 74% of key teachers and principals reported that they were provided with modules/ materials that were helpful for their profession. Where as 53% of teachers' respondent disagree on the provision of materials or modules. This shows that significant numbers of teachers were not provided helpful materials where as key teachers and principals had access for them.

Respondents, in item '4', in the above table were asked if scarce materials are utilized equally among clustered (satellite) schools. Respondents, 55% of key teachers and principals, and 57% of teachers reported that they didn't utilize scarce materials equally among themselves. This shows that cluster resource centers were not able to provide equal service to their respective satellite schools.

4.2.2.5 Perception of Stakeholders

In the following questions the respondents were asked to measure the activities of school management using options "good, fair, poor" to decide.

Table 9: Perception of key teachers and teachers on the activities of School Management

No	Items	Key teachers No. 16						Teachers No. 119						Total No. 135					
		Good		Fair		Poor		Good		Fair		Poor		Good		Fair		Poor	
		No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1	Facilitate professional training in the school	8	50	6	38	2	12	56	47	34	29	29	24	64	47	40	30	31	23
2	Coordinate community participation in school improvement	6	37	7	44	3	19	51	43	46	39	22	18	57	42	53	39	25	19
3	Adjust condition for mentoring program	10	63	4	25	2	12	57	48	46	39	16	13	67	50	50	37	18	13
4	Supervise classroom instruction	13	81	2	12	1	7	87	73	25	21	7	6	100	74	27	20	8	6

In the table above, for the question item '1' 50% of key teachers and 47% of teachers responded that the management showed good facility in facilitating professional training in the school. On the other hand 38% of key teachers' and 29% of teachers has reported that the activity of the management on the above noted item is fair. This shows that the management body was not strong enough to facilitate professional training in the school.

Concerning item '2' in the above table, the respondents reflected that the activity of the management in mobilizing the community was fair. This is

confirmed by 44% key teachers and 39% teachers. On the other hand 37% key teachers and 43% teachers agreed that the management facility in involving the community in school improvement was good. On the contrary, 19% of the total respondents reported that the management activity was poor. Generally the given opinion shows that the community needs further agitation to participate in CRC.

For question item number '3' the majority of key teachers (63%) and teachers (48%) suggested the performance of the management, concerning adjustment of mentoring program was good. On the other hand 25% key teachers and 39% teachers reported that the management should adjust better condition for the mentoring program.

Concerning question 4, 81% of key teachers and 73% of teachers reported that the performance of management in supervising classroom instruction was good. This shows that proper supervision is implemented in the teaching learning process by the management of the cluster school.

4.2.2.6 Changes Because of Participation in Cluster Based Professional Development

Respondents evaluated learning conditions based on the given items which indicate learning improvement.

Table 10: Impact of CRC on learning activities

No	Items	Principals and key teachers No. 31						Teachers No. 114						Total No. 145					
		Highly improved		Some what improved		Not improved		Highly improved		Some what improved		Not improved		Highly improved		Some what improved		Not improved	
		No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1	Dropout rates	3	10	11	35	17	55	11	10	57	50	46	40	14	10	68	47	63	43
2	Pass rate	1	3	9	29	21	68	5	4	52	46	57	50	6	4	61	42	78	54
3	Students activity in the teaching learning process	3	10	12	39	16	51	13	11	44	39	57	50	16	11	56	39	73	50
4	Teachers competence regarding the subject they teach	-	-	17	55	14	45	7	6	59	52	48	42	7	5	76	52	62	43
5	Women's participation in the teaching learning process	-	-	15	48	16	52	3	3	47	41	64	56	3	2	62	43	80	55

As the above table shows 55% principals and key teachers and 40% teachers noted that the dropout rates were not improved. Again 68% of principals and key teachers and 50% of teachers reported that the pass rate was not improved. On the other hand 47% of the total number of respondents said that the rate of dropouts and pass was some what improved. Other insignificant

number of respondents noted that dropouts and pass rate was improved. The response of the majority shows that dropouts and detainee's issue remained a problem.

In item '3' respondents were asked to scale the students' activity in the teaching learning process. 50% of the total respondents noted that the students' activity is not improved. On the other hand significant number of respondents (39%) reported that the activity of the students in the teaching learning process is somewhat improved. This shows that teachers' professional training should be strengthened to bring about the improvement of students activity in the classroom.

Regarding teachers' competence in their respective subjects 52% of the total respondents said that it is some what improved. On the other hand significant number of respondents (43%) reported that it is not improved. This shows that subject focused professional training should be strengthened in clustered schools.

In item '5' respondents were asked to scale women's participation in the teaching learning process. 52% of principals and key teachers and 56% of teachers said that women's participation is not-improved. On the other hand 43% of the total respondents reported that it is somewhat improved. This shows that, teachers' awareness on gender issue and attention paid for women's participation in the classroom is low. Hence, the study indicates that more emphasis should be given for women education.

Factors that hinder the effectiveness of cluster school resource center

In the following table respondents were asked to indicate the degree of hindrance based on the given items. NB. Options of five scales were given to respondents to expand the scope of their choice. In the analysis very low is reduce to low, and very high to high, because to simplify the analysis. However, the table shows both the 5 scales and 3 scales side by side to give clear picture to the reader.

Table 11: Factors that Influence (Hinder) the Effectiveness of CRC

No	Hindrance	Respondents	SCALE										Reduced to 3 scale							
			VL		L		M		H		VH		Low		Medium		High		Total	
			No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1	Absence of commitments to work collaboratively with colleagues	P&K	-	-	4	13.3	9	30	5	16.7	12	40	4	13.3	9	30	17	56.7	30	100
		T	9	6.9	19	16.4	29	25	29	25	31	26.7	27	23.2	29	25	60	51.8	116	100
		Total	38	5.5	23	15.8	38	26	34	23.3	43	29.4	31	21.2	38	26	77	52.7	146	100
2	Lack of follow up and monitoring from the school management	P&K	-	-	2	6.7	9	30	12	40	7	23.3	2	6.7	9	30	19	63.3	30	100
		T	8	6.9	15	12.9	32	27.6	37	31.9	24	20.7	23	19.8	32	27.6	61	52.6	116	100
		Total	8	5.5	17	11.6	41	28	49	33.6	31	21.2	25	17.1	41	28.1	80	54.8	146	100
3	Lack of adequate training	P&K	1	3.3	6	20	8	26.7	10	33.3	5	16.7	7	23.3	8	26.7	15	50	30	100
		T	8	6.9	23	19.8	28	24.1	38	32.8	19	16.4	31	26.7	28	24.1	57	49.1	116	100
		Total	9	6.2	29	20	36	24.7	48	32.9	24	16.4	38	26	36	24.7	72	49.3	146	100
4	Absence of cooperation from parent teachers association	P&K	2	6.7	8	26.7	8	26.7	10	33.3	2	6.7	10	33.3	8	26.7	12	40	30	100
		T	16	13.8	15	12.9	25	21.6	45	38.8	15	12.9	31	26.7	25	21.6	60	51.7	116	100
		Total	18	12.3	23	15.8	33	22.6	55	37.7	17	11.6	41	28.1	33	22.6	72	49.3	146	100
5	Fail to reach the participation of the community in school improvement program	P&K	1	3.3	9	30	8	26.7	9	30	3	10	10	33.3	8	26.7	12	40	30	100
		T	9	7.8	22	19	29	25	39	33.6	17	14.7	31	26.7	29	25	56	48.3	116	100
		Total	10	6.8	31	21.2	37	25.3	48	32.9	20	13.7	41	28.1	37	25.3	68	46.6	146	100
6	Inculcating spirit of competition	P&K	2	6.7	2	6.7	11	36.7	10	33.3	5	16.7	4	13.3	11	36.7	15	50	30	100
		T	6	5.3	17	15	30	26.5	40	35.4	20	17.7	23	20.4	30	26.5	60	53.1	113	100
		Total	8	5.6	19	13.3	41	28.7	50	35	25	17.5	27	18.9	41	28.7	75	52.4	143	100
7	Accountability	P&K	2	6.7	2	6.7	10	33.3	10	33.3	6	20	4	13.3	10	33.3	16	53.3	30	100
		T	10	8.8	12	10.6	33	29.2	31	34.5	19	16.8	22	19.5	33	29.2	58	51.3	113	100
		Total	12	8.4	14	9.8	43	30.1	49	34.3	25	17.5	26	18.2	43	30.1	74	51.7	143	100
8	Reward for good performance	P&K	7	23.3	5	16.7	8	26.7	7	23.3	3	10	12	40	8	26.7	10	33.3	30	100
		T	11	9.7	18	15.9	27	23.9	38	33.6	19	16.8	29	25.7	27	23.9	57	50.4	113	100
		Total	18	12.6	23	16.1	35	24.5	45	31.5	22	15.4	41	28.7	35	24.4	67	46.9	143	100

Key: VH= Very high, H= High, M= Medium, L= Low, VL= Very low P&K= Principals and Key teachers, T= Teachers

In item '1' in the above table, respondents were asked if absence of commitment to work collaboratively with colleagues hindered cluster resource center from being effective. The majority of respondents, 77(52.7%), reported that the level of hindrance was high. This shows that the respondents were not committed to work collaboratively.

In addition, in item 2 the respondents were asked if lack of follow-up and monitoring had hindered the effectiveness of CRC. Respondents that were 80 (54.8%) indicated that its hindrance was high. Significant number of respondents that were 41(28.1%) answered the degree of hindrance concerning lack of follow up and monitoring was medium. Other few respondents that were 25(17.1%) said that the hindrance was low. This shows that lack of follow up and monitoring impeded the effectiveness of CRC.

In item '3' the respondents were requested if inadequacy of training could be a hindrance for effectiveness of CRC. For this question 72(49.3%) respondents answered that its hindrance was high and 36(24.7%) of them responded that the hindrance was medium. On the other hand 38(26%) respondents reported that the hindrance of lacking adequate training was low. This shows that more attention should be given to enhancing training program.

In item '4' and '5' the absence of cooperation from PTA and fail to reach the participation of the school community were presented to the respondents, if it appeared to hinder the effectiveness of CRC. The majority respondents 72(49.3%) and 68 (46.6%) reflected their opinion that the hindrance is at high level. On the other hand significant number of respondents 41(28.1%) for both items (4 and 5) reflected that the level of the hindrance was low. This shows that the involvement of PTA and the community in CRC activity was not satisfactory.

Other factors listed in item '6' and '7' (lack of reward and accountability) were presented to respondents if they were found impediment for the effectiveness of CRC. Of the respondents 67(46.9%) replied that the hindrance of lack of reward for good performance was high. Again the respondents said that there should be accountability in the activities of CRC. Those respondents who accounted, that lack of accountability hinder CRC activity were 74(51.7%). This shows the respondents believe that rewarding for good performance and inseminating accountability advances CRC activities in schools.

4.3 Interpretation of Qualitative and Quantitative Data

In this part of the study both qualitative and quantitative data are integrated and interpreted.

4.3.1. Practice of CRC Innovation at Education Bureau Level

The interview made with principals, focal persons and officials proved that the Education Bureau had no organ of CRC. The absence of organ and structure of CRC at the Bureau level is likely to create a gap of information with sub-city officials; Kotebe College of Teachers Education, Kebele Education Team and Cluster Resource Centers. The problem of lacking organ of CRC which leads to loose linkage with different echelons influenced the feeling of responsibility and accountability. Therefore, the study shows that lack of monitoring and follow up which has its own impact on CRC practice derived from lack of organ at the city level.

4.3.2. Practice of Cluster School Innovation at Cluster Primary Level

The interview with principals indicated that CRC's are organized and structured at the cluster school level. Although responsibility was shared among the members of the management committee who include all the satellite schools principals, they are not committed to doing cooperatively at their respective cluster resource center. The CRC school principals who are the chair persons of the management committee could not bring the members to plan and implement innovative action of cluster primary school practices. There fore, lack of commitment and devotion from the part of principals' influence the active participation of teachers in CRC. As cullinsford (1995:179) reflected a school is a product of all who are in it. One has to begin to change. The whole also begins to change. However the study shows that principals of the satellite schools who manage the CRC's are not acting to promote the practice of CRC innovation, so that teachers lacked to work collaboratively at their respective center.

The absence of cooperation to working collaboratively in CRC by management group affected the effective practices of cluster resource centers in implementing CRC innovation. As the response of the beneficiaries indicates (Refer to table 7), 35% of key teachers and 55% of teachers have never utilized teaching aids made at CRC. Again 59% of key teachers and 62%

teachers have never been involved in preparing teaching aids. In addition 71% of key teachers and 76% teachers replied that they have never been involved in evaluating teaching aids at CRC.

The management committee at CRC level was responsible for planning cluster activities, identifying needs to provide short tern training program, create opportunities for mutual sharing of experience, improve the functioning of the clusters and professional development of teachers. The management committee was also responsible for identifying mechanisms to promote community participation, coordinating and implementing collaborative work among stakeholders, creating relationship with concerned officials and supervisors.

However the management committee at cluster centers was not observed to exercise its responsibilities. This shows that the management committee at CRC level need follow up and monitoring to effectively implement their responsibility. Again the study shows that need assessment to identify training needs of management committee should be facilitated to upgrade their activity.

This shows that CRC management committee was not committed to the responsibility given, where as the beneficiaries primary school teachers and students are not benefited from the resources CRC's could provide.

4.3.3. Practices of Cluster School Innovation at School Level

The interview made with officials and principals indicated that there is improvement in teaching and learning at the classroom setting after the CRC innovation is introduced to cluster primary schools. The focus group discussion and classroom observation depicted that active learning and continuous assessment was employed in the classroom setting.

The CRC innovations which focus on capacity building of teachers' profession through in-service program and provision of material support enhanced the teaching learning in cluster primary schools.

The focus group reflection indicated that most of the teachers were practicing active learning, and using continuous assessment to promote effective learning in the classroom. Similarly class observation depicted that most of the teachers were able to manage their respective classes in using student approach and systematic evaluation. Document observation revealed that cluster

schools were provided with supplementary materials, modules, reference books which enable teachers to enrich their respective subject matter.

According to the report of the beneficiaries (Refer to table 8) 65% key teachers and 57% teachers agreed that they utilize supplementary materials and reference books provided by CRC. This shows that the support materials provided to satellite schools, the in-service professional training given to the staff of primary schools has been the corner stone for the improvement of classroom instruction.

4.3.4. Practices of Clustered (Satellite) School Management

From the interview made with officials it was learned that there was no collaborative work of principals in managing CRC activities at the CRC level. As the document at CRC's indicated, principals of clustered schools seized to meet according to their plan.

64% of key teachers and teachers reported that the activity of the management group in facilitating teachers' professional development was good. However, according to the words of CRC representative at AAEB, the management group was not found active in its participation in practical activities to implement CRC objectives. The activities of management group at clustered schools, as reported by the respondents were found to be good in coordinating community participation in school improvement. This was supported by 73% key teachers and 42% teachers. This was supported by 44% key teachers and 39% teachers who indicated that the activity of management group in facilitating community participation in school improvement was good.

The data analysis of class observation showed that teachers were able to manage classroom having the necessary document with them (weekly lesson plan, mark list, attendance sheet, notes, etc). This was supported by 81% key teachers and 73% teachers that the management group supervises classroom instruction. This shows that supervision in the clustered schools classrooms was good.

According to the observation of the researcher list of mentors and mentees, for mentoring program was found fixed on the notice board at CRC's. However from the total respondent 50% of key teachers and teachers responded that adjusting condition for mentoring program was fair

and 18% reflected it was poor. This shows that mentoring program in schools was not given more attention to support teachers' professional training program.

Focus group discussion and class room observation indicated that the teaching learning process at the result of CRC innovation was improved. The questionnaire presented to key teachers' and teachers showed that the over all activity of school management regarding facility of professional training, coordinating community participation, facility of mentoring program and supervising classroom instruction was good. Regarding the items noted above, the majority respondents that is; 47%, 42%, 50% and 74% key teachers and teachers reported that the activities of the school management was promising. This shows that the management members of the school enhanced of the effective practice of CRC innovation in cluster primary school.

4.3.5. Practice of Training Experience towards Improving Classroom Instruction

Interview made with principals, focal persons and documents observed revealed that teachers, principals and key teachers were engaged in experience sharing program conducted at the central venue and at school level. According to the questionnaires filled, 79% principals and 64% teachers indicated that they had the chance to share their experience at the training centers (Refer to table 5). Among those who contacted the training centers, 91% principals and 84% teachers shared their experience at the school level. On the other had the document observed at Addis Ababa Education Bureau reflects that significant number of participants have been engaged at the central venue training centers (Refer to page 74).

In addition, the assessment made on training experience, regarding topics of training items (Refer to table 6), reflected that the majority principals, key teachers and teachers participated in the training. According to the answer given; 91%, 83%, 80%, 89% and 69% of the total stakeholders shared their experience in topics of continuous assessment, student centered approach, civic and ethical education, lesson plan preparation and action research respectively. Again 74% principals and key teachers and 62% teachers reflected that they had the knowledge of increasing students' enrollment and decreasing wastage of education.

The training experience of principals' key teachers and teachers show that the cluster primary school innovation has disseminated in the stakeholders to be applied at the classroom setting.

This implies that the improvement seen in the participation and academic achievement of students is the product of the practice of cluster school innovation at primary school.

On the other hand the training experience held at the central venue, which lacked multiplying effect shows that the necessary budget was not allotted by the concerned officials to enable the facility of training at the grass root level.

4.3.6. Cluster Primary School Improvement in the Teaching Learning Process

As it is reflected by MOE (2002), participation of students participation of women, repetition rate, dropouts rates, results of students as compared to the previous year etc. were mentioned as indicators of follow up and evaluation in cluster schools in teaching and learning process. The method of follow up and evaluation in CRC includes semester report, meeting.

a) Dropout and Pass Rate:- It was learned from the document that dropouts rate decreased in 1998 (2006) by 0.7% as compared to the previous year 1997 (2005). However 63% of the total respondent reflected (qualitative data) that the dropout rate is not improved. This shows that the improvement of dropout rates was not acknowledged by the majority of the staff. Regarding the passing rate the document shows that the passing rate which was 94.2% in the year 1997 (2005) was found to increase to 95.3% in the following year 1998 (2006). The result of the document shows that the pass/rate was improved by 1.1%. However 78% respondents in the quantitative analysis, expressed that the pass rate was not improving. This shows that the management and staff members of cluster schools did not have the practice to review the development in teaching learning process, and the result of in service professional training. Therefore, the concrete evidence found from the document was taken to highlight that dropout and pass rate at cluster schools is improving year after year (2005-2006). This shows that cluster primary school innovation decreased dropout rates of students of the beneficiary primary schools.

b) Teachers Competence Regarding the Subject they taught

As the data collected from classroom observation indicates, most of the teachers had the knowledge of the subject matter they taught in the class. Besides that, the document analysis, and interview with officials reflected that supplementary materials were close to the content of the curriculum which creates additional knowledge for teachers. On the contrary, 43% of the

total respondents reported that teachers' competence regarding the subject they taught was not improved. Again 52% of the total respondents manifested that teachers competence in the subject they taught was some what improved. For the reason that competence in learning and teaching is a continuous process, the study shows that further experience sharing for teachers on the subject they taught should be facilitated.

c) Participation of Students in the Classroom Setting

As it was learnt from the group discussion, students' eagerness towards learning through experience sharing was developed. The target Focus groups discussion indicated that students have not been motivated in lecture method, where as they are actively participated in active learning. The class observation showed that students were more active in participation, when teachers actively implement variety of methods. 50% of the respondents in the questionnaire answered that students' activity in the classroom is some what improved and highly improved. The same number respondents (50%) answered that students activity in the teaching learning process is not improving. Although the reflection of both groups in the questionnaire is in equal percent; the document evidence that shows the result of students is improving and the focus group discussion witnessed that the participation of the students in the classroom interaction is increasing. And the researchers' eye witness of student participation during the classroom observation put the improvement of students' activity in the teaching learning process on the upper hand. This shows that cluster school innovation improved the participation of students' in the classroom by applying student centered approach.

d) Participation of Female Students in the Classroom Setting

As it was indicated by Focus group discussion and class observation women participation in the class as compared to male students was reliable. It is also seen in document analysis (table 4) that women dropout and pass rate has been improved in 1998 (2006) as compared to 1997 (2005). It was improved by 0.2% in dropout and by 1.2% in pass rate.

However, the respondents (80%) in table 10 mentioned that women's participation in the teaching learning process was not improved. Nevertheless, the data collected from class observation, focus group discussion and document analysis show that women participation was improving at clustered schools. This shows the innovative action of cluster primary school

which has given attention for women education improved female should participation in the classroom setting.

4.3.7. Factors that Influence the Practice of Cluster Primary Schools Innovation

Organizational arrangements that can influence innovations may be of various types. Delegation of responsibility and channels of communication could be noted Nicholas (1983:62). Responsibility without accountability would bring lack of impact on school based innovation. Regarding this the respondents of the study reflected various factors that could hinder cluster school activities. School principals and officials reflected that lack of commitment, follow-up and monitoring, absence of cooperation among different groups, affected the practices of innovative action.

Again, as quantitative result manifest, from the total respondents, the majority, i.e.; 52.7%, 54.8% and 49.3% informants reflected that absence of commitment to work collaboratively, lack of follow-up and monitoring, and absence of cooperation from P.T.A respectively, hindered the activities of CRC. Other factors such as fail to reach the participation of the community in school improvement program, fail to apply spirit of competition, absence of reward for good performance and accountability were found to influence cluster schools activity.

On the other hand, it is worth remembering that if organizational changes require teachers to undertake new roles, adequate time must be allowed for this and in the meantime there may be a period of temporary inefficiency (Stinchcombe, 1965). This implies that the relationship between organizational arrangements and innovation should regard school, department and classroom organization as flexible and dynamic, not fixed and rigid, and they should therefore, be alert to the effects of factors addressed and be prepared to modify when necessary.

This shows that the beneficiaries of cluster primary school innovation are not made to be aware of the above mentioned hindrances affecting CRC innovation. In addition, the study indicates that there should be commitment, cooperation, competition, accountability and follow-up to bring about quality of education in cluster primary school.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter deals with summary, conclusions and recommendations. Primarily, brief summary of the study is presented. Secondly, conclusion for the fundamental findings is given. At last, possible recommendations are given based on the major findings of the study.

5.1 Summary

The main purpose of the study is to investigate the practice of cluster primary schools in implementing CRC innovation in Addis Ababa City Administration.

Specific Objectives

Based upon the problem to be investigated, the study is intended to:

1. Assess CRC organization and structure in Adds Ababa.
2. Assess classroom practices in clustered schools.
3. Identify the activities of beneficiaries in utilizing CRC
4. Assess improvement in students achievement

Basic Research Questions

5. How do cluster schools implement CRC innovation as an organized system?
6. How do cluster school innovation practiced at the City Administration?
7. What are the improvements seen in the practice of cluster school innovation?
8. What are the factors that influence the practice of cluster school innovation?

To gather data on the topic, the study was conducted in four CRC primary schools at four different sub-cities. The CRC schools were Birhanih Zare (Bole), Abyot primary (Yeka), Fitwrari Leake Adgeh (Nifas Silk Laftto) and Temenja Yazi (Kirkos). Among 20 satellite schools which were found in four CRC's, 12 satellite primary schools were included in the study.

The data was gathered through semi-structured interview, document analysis, focus group discussion, class observation and questionnaire. The data obtained using qualitative method were collected and analyzed in the first phase of the analysis. Secondly, the data collected

through survey (quantitative method) were collected and analyzed using percentage. Finally the results of both methods were integrated, triangulated and interpreted to answer the basic questions.

Classroom observation and group focus discussion were employed to examine teachers and students activity in the classroom learning at the result of in service teachers' development training program. Document analysis was employed to investigate the utilization and distribution of AED/BESD support educational materials at CRC's. Semi structure interview was conducted to realize the function of CRC's. Questionnaires were employed to assess the activities of CRC's and participation of stakeholders in the CRC's. The collected data from the questionnaire was organized, entered, cleaned and analyzed using statistical packages for social sciences (SPSS). The main findings of the study are the following.

Major Findings

1. Addis Ababa Education Bureau has no Organ of CRC and system of Follow-up and Monitoring

Interview made with officials confirmed that Addis Ababa Education Bureau has no structure and model of CRC. The officials and focal persons of AED/BESO indicated that CRC was not functioning as an organ at the Bureau. Therefore, chain of responsibility regarding CRC didn't appear in Addis Ababa. On the other hand teacher education institutions and Kotebe College of Teacher education were not linked either to the education Bureau or CRC's to contribute their part in in-service teachers' professional development. Lack of coordination to working cooperatively and collaboratively have its own influence on the practice of implementing CRC innovation in clustered primary schools.

2. Practice of Innovative Action Lacks Collaborative Work at CRC

The interview result and the documents of CRC's confirmed that the management committee members were not working collaboratively in CRC. The representative for CRC at Addis Ababa Education Bureau confirmed that management committee at CRC level is not in a position to bring beneficiaries to participate in cluster activities. As the questionnaire result manifests 71% principals and 77% teachers confirmed that they did not share their experience at cluster resource center. The representative of CRC from Addis

Ababa Education Bureau indicated that different school types had no the same concern on working collaboratively. Therefore lack of cooperation and communication among cluster schools affects the practice of cluster schools activity.

3. Lack of Space Influenced the Practice of Cluster Primary Schools

Space in the cluster resource center is not set according to the standard. Most of the CRC's used one room for office, store and display room. The rooms observed did not fit for meeting (training center) and collaborative work. In addition, in some CRC's the cluster schools center served as pedagogical center of the satellite school.

4. Lack of Transmission of Multiplying Effect Influenced the Practice of Cluster Primary School Innovation

Principals, staff development facilitators and key teachers of various CRC's shared their experience on various topics at the central venue (Addis Ababa Education Bureau) multiple times. However, the TOT program that was conducted at the center was not found to have multiplying effect. Because of most of the participants who were involved in the TOT program were not found to conduct experience sharing at their respective CRC's. This was confirmed by the interview and document analysis. Lack of transmitting multiplying effect, down to earth influenced the practice of cluster schools.

5. Regular follow-up and monitoring Affected the Practice of CRC Innovation

Officials, representative of CRC, and principals agreed on lack of regular supervision around CRC. Staff development facilitators and principals of CRC's asserted that they were not given attention by Kebele education team, sub-city education department and Addis Ababa Education Bureau supervisors and officials. BESO officials pointed that their follow up was scheduled to once in a year. Therefore lack of follow up and monitoring in CRC influence proper activity school practices.

6. AED/BESO Support Materials are closely Related to Subject Matters Taught at Primary Schools

The first cycle education which are integrated in to four core subjects (languages, environmental science, mathematics, Aesthetics and physical education) where as the grade

seven and eight physics, chemistry and biology as learner subjects were found to be enriched with supplementary materials, modules and reference books prepared by AED/BESO and Addis Ababa Education Bureau. The interview conducted with the officials and the document at CRC revealed the close relationship of the support materials with the subject matters taught at primary schools.

7. Continuous Assessment and Active Learning are effectively practiced in most of the Clustered Primary Schools

It was confirmed by class observation that teachers started evaluating their students using different mechanisms. The focus groups witnessed that most of the teachers were evaluating them through various activities in the classroom. It was learned form the majority of respondents that the stakeholders (91%) had training experience in continuous assessment. In addition most of the teachers apply active learning.

8. Students have more attraction towards civic and ethical education

The focus groups have reflected that they communicate freely in the civics period as compared to other subjects. Result of questionnaire indicated that 80% of the respondents had been trained in civic and ethical education. From the document analysis it was observed that there were various supplementary materials regarding civic and ethical education.

9. Women participation increased in clustered schools

As it was learned from classroom observation and was reported from group focus discussion female students exceeded male students in class participation and group work. The analysis of the 2005/2006 statistics showed female students had a better pass rate.

5.2 Conclusion

From the above major findings the following conclusions are made:

1. The findings of the study revealed that CRC's, were not organized and structured as a body in a city level. The absence of structure form top to down created loose linkage between officials at different levels and between different echelons and clustered primary school. The result of the study indicated that there was no proper follow-up and monitoring made to strengthen the practice of cluster primary school innovation by the

concerned officials. For the reason that there was no follow-up mechanism the CRC management committee at cluster school level seized to work collaboratively so that it influenced the practice of cluster primary school innovation.

2. The cluster primary school innovative practice has improved the teaching learning process in the classroom. Dropout and pass rate, student participation in the classroom, participation of female students, teachers utilization of student centered approach, and students' result as compared to the previous years were found improving.

3. Levels of teaching aid preparation, collaborative work of teachers, and multiplying effect after TOT program, space for working rooms, did not improve.

5.3 Recommendations

Based on the aforementioned findings and conclusions, the following recommendations were made to maintain the practice of cluster primary schools innovations in Addis Ababa City Administration.

1. **Cluster primary schools need to be connected structurally from up to down to systematize the functioning of CRC organ.**

In order to make the practice of cluster primary school more effective, in sense of organization, responsibility and accountability it is advisable if Addis Ababa Education Bureau should look back to making arrangement for establishing CRC organ in the city.

2. **Cluster primary school need to solve the problem of space in CRC**

The stakeholders of cluster primary school and the community at large should consider the problem of space in cluster resource centers. Since cluster centers are places where instructional problems are solved it is advisable if beneficiaries of CRC initiate a plan (project) to make the Society or Non-Governmental Organization to take the initiative in building additional room for CRC.

3. **The training strategy need to target the immediate agents at the school level**

The training strategy designed by AED/BESO II project need to give priority to the training at the school level which could result in feasibility. Therefore, it is advisable if direct training be

provided to the school staffs of every school in a cluster. Again, in relation to the training, utilizing CRC need to be attached to result based system of education by exercising the practice of preparing portfolios by the beneficiaries.

4. **The cluster primary school innovation which has marked a difference in classroom instruction needs to go ahead.**

Capacity building of teachers' profession, material and technical support provided to cluster primary schools, improved dropout and pass rate, practice of students centered approach, female students' participation, continuous assessment. Therefore, it is recommended that the innovative action may go on with its program of improving the quality and equity of primary education in the city.

5. **Stakeholders of cluster primary schools need to practice to working collaboratively at CRC for the improvement of instruction in the classroom.**

Teaching as a cooperative work, need to be enhanced through team work and communication. Again, teacher as agents of change are expected to make use of cluster primary school innovation, which is cost effective, through consistent experience sharing and collaborative work at CRC. Therefore, it is recommended that continuous and sustainable program be designed to develop professional skills of teacher and principals of cluster primary schools to bring about further improvement in the practice of cluster primary school innovation.

6. **Factors that influence innovative action need to be considered for the success of cluster primary school innovation.**

It is advisable if follow up and monitoring, accountability, commitment, etc be taken as part of the teaching profession for the effectiveness of practice of cluster primary school innovation.

Bibliography

AACAEB (2006). 'Annual Statistics of Primary Schools' (Government, private, missionary,…) Addis Ababa (Unpublished).

AED/BESO (2002). 'Teacher Professional Development Profile:' Education Quality Improvement Profile: Education Quality Improvement Program. Mekele, USAID.

Ali Yasin, (2005). Teaching with and Learning from Electronic Media: A Case Study on Satellite TV Instruction in Debre Berhan General Secondary School. Masters Thesis A.A.U, (Unpublished).

Alkin, M. (1992). *Encyclopedia of Educational Research.* 6th edition USA.

Amare, (1991). 'Availability and use of Instructional Materials in Tigray Primary Schools.' IER Flambeau, Vol. 7, No. 1, AAU.

Andrews, J. et al. (1990). '*Effective in-service Programmes in Developing Countries*', in Teachers and Teaching in the Developing World. Garland, New York.

Cedric, C. (1995). *The Effective Teacher*. Redwood books, Great Britain.

Cohen L. and Manion L. (1994). *Research Methods in Education*. 4th edition, J and L Composition Ltd, Filey, North Yorkshire, Great Britain.

Craig, H., Kraft, R. & du Plessis, J. (1998). Teacher Development: Making a Impact. Washington, DC: USAID/ABEL and World Bank.

Creswel, J.W. (2003). *Research Design*. Sage Publication, Thousand Oaks, California, USA.

Culling F. (1995). *The Effective Teacher*. Redwood Books, Great Britain.

Dehasse, et al. (2002). 'Education 2004 and Education 2004 Transition Projects', Washington, DC: Academy for Educational Development.

Derbessa, D. (2004). Fundamentals of Curriculum Development. Addis Ababa University.

Dittmar, F. and Vivward. S. (2002). 'School Clusters in Namibia:' Breaking isolation creating connections. Retrieved from http://www. School Clusters. Com/ovivward photo by Fritz Dittmar.

Dykstra, A and Kucita, P. (1997). 'School-Based Management Through Cluster Schools:' A Case study from Cambodia. http://www/.worldbank.org/ education/ UNICEF.doc Retrieved 11/18/2006.

Easten C. and et al (1999). *Coordinating the Curriculum in the Smaller Primary School.* Cornwall, TJ International Ltd.

Edwards, A. and Collins, J. (1996). *Mentoring and Developing Practice in Primary Schools Supporting Student Teacher Learning in Schools:* Buckingham, Open University Press.

Engel, C. and Clarke, R. (1986). 'Higher Education Review. Professional Education for Capacity and Change.' Warwick Volume 18, Number 3.

Engels, J. (2001). *Making Classrooms Talk:* Uganda Sustains Its Teacher Improvement and Support Systems, Washington, DC: Academy for Educational Development.

Federal Democratic Republic Government of Ethiopia (1994). *Education Sector Strategy.* Addis Ababa, Chamber Printing House.

Fleming, M. L. (1980). *From Seeing and Learning to Remembering a Conception of Instructional Process.* Netherlands: Elsevier Scientific Publishing Company.

Freeman, D. and Freeman, Y. (1999). *Educational Consideration.* Effective Practices for English Language Learners. USA: Vol. XXVI, Number 2.

Galloway, and Edwards, A. (1992). *Secondary School Teaching and Educational Psychology.* New York: Longman.

Garcia, Recardo, L. (1998). *Teaching for Diversity.* Bloomington: Flamer.

Halpin, A. W. (1967). 'Change and Organizational Climate', *Journal of Educational Administration,* Vol. 5, No. 1.

Herbert, et al. (2002). 'Comprehensive Evaluation of Quality Through Supporting Teaching' (QUEST), Ministry of Education, Science and Technology, Save the Children/USA.

Hillmelman, T. (1996). Rational and Collaborative Advantage. Huxam (ed.), London: Sage.

Holy, E. (1974). 'Innovation and the Social Organization of the School', in *Creativity of the School,* CERI Technical Report No. 1 (Paris: Organization for Economic Co-Operation and Development).

Hopkin, A. G. (1986). 'Staff Perspective on Teaching and Learning Styles in Teacher Education in Botswana.' *Journal of International Society for Teacher Education* (1):1-11.

Huffman Jane B. et al. (2000). *Educational Considerations. The PRO Program: One District's Experience with Decentralizing Staff Development*. Vol. XXVII. Number 2. USA.

Kebede Nemomssa, (2006). Effectives of Cluster-Based In-Service Teachers Professional Development in Ethiopia. The Casein Guji Zone. Unpublished M.A. Thesis, Addis Ababa University.

Knapp, S.D. (1993). *The Contemporary Thesaurus of Social Science Terms and Synonyms*. Arizona: Oryx Press.

Laws, S. (2003). *Research for Development.* New Delhi: Sage Publications.

Leu, Elizabeth (2004). 'Building the Quality of Basic Education with a Focus on Teachers: An Approach and Case Studies of Successful Practice' Washington, DC: Academic for Educational Development.

Logan, L. and Sachs, J. (1997). *Meeting the Challenges of Primary Schooling*. Ebbwvale, Great Britain.

Maclink, M. (2004). A Survey of Teacher In service and Cluster Program: A.A. Unpublished.

Marginson, S. (1993). *Educational and Public Policy in Australia*. Cambridge: Cambridge University Press.

MOE (2002). The Education and Training Policy and Its Implementation. Addis Ababa, Mega Printing Press.

_____ (2002). Education Sector Development Prgrogramme. Addis Ababa: United Printers.

_____ (2003). The need for school clustering in Ethiopia. Addis Ababa: Ministry of education.

New Saith Wales department of School Education (1995). Quality Assurance School Reviews: Principles and process. New South Wales department of School Education, Sydney.

Nicholas, A. (1983). *Managing Educational Innovations*. Boston: George Allen and Unwin.

O'neill, J. and Kitson, N. (1996). *Effective Curriculum Management.* New York: Routledge.

Paulo, F. (1970). *The Pedagogy of the Oppressed.* New York: Herder and Herder.

Pratt, D. (1980). *Curriculum Design and Development.* Harcourt Brace Jovanovich, Inc. New York.

Psacheroponlos, G. (1985). *Education for Development. Analysis of Investment Choices.* London: Oxford University Press.

Queis, D. (2004). The shift from Teaching to Learning. Challenges and Methods of Active Learning and Student. Centered Teaching. (Paper presented at the SEAMEO-UNESCO Education congress, Bangkok 27-29 may 2004).

Quijano, Y. (2004). 'Enhancing School – Based Management: TEEP Experience' Department of Education, Pasig City, Philippines.

Roche, C. (1999). Impact assessment for development agencies: Learning to value change. UK: Oxford Publishing.

Sadker, P. M and Sadker, M. D. (1997). *Teachers, Schools and Society.* U.S.A: McGraw-Hill Companies.

Schon, D. (1987). *Educating the reflective practitional.* San Francisco: Jossey-Bass.

Simon and Schuster (1979). Webster's New Twentieth Century Dictionary UNABRIDGED. (2nd ed.). New York: Oxford Press.

Sharp, R. and Green A. (1975). *Education and Social Control.* London.: Routhedge and Kegan Paul.

Silver, H. (1994). *Good Schools, Effective Schools.* Great Britain: Redwood Books.

Starratt, R. (1993). *The Drama of Leadership.* London: Flamer Press.

Steward, L. (2003). Best Practices in the Implementation of Cluster-Focused Strategy. Office of economic Development. The Frank Hawkins Kenan Institute of Private Enterprise. Retrieved 16/01/2007, from http://www.kenan-flagler.unc.edu/assets/ documents/ ED-RIRP-Best Prack.

Transitional Government of Ethiopia (1994). Education and Training Policy. Addis Ababa, ST. George Printing Press

USAID (2006). 'Sustainable Strategies and Plan'. Component 2: In-service Teacher Education. Addis Ababa (Unpublished).

Wardani, IG. (2004). 'Enhancing Students' Learning Through Creative and Productive Learning Model (Paper Presented at SEAMEO-UNESCO Education Congress, Bangkok, 27-29 May 2004).

ኤኢዲ ቤሶ II:: (1995):: የተጓዳኙ ት/ቤቶች አደረጃጀትና አመራር መመሪያ:: አዲስ አበባ፣ ያልታተመ::

የአማራ ብሔራዊ ክልላዊ መንግስት ትምህርት ቢሮ:: (1997):: የአማራ ክልል የመጀመሪያ ደረጃ ትምህርት ቤቶች ጉድኝት አደረጃጀትና አመራር መመሪያ:: ባህር ዳር፣ ያልታተመ::

Appendix 1

Addis Ababa University

College of Education

Department of Curriculum and Teachers Professional Development Studies

Theses Topic: The Impact of Cluster Schools in implementing primary school curriculum in Addis Ababa

Questionnaires to be filled by teachers, key teachers and principals

The questionnaire which is part of the study, designed to collect relevant data about the impact of cluster schools in implementing primary school curriculum in Addis Ababa City Administration. So your sincere cooperation in answering each question is highly important.

1. No need of writing your name.
2. Mark your response in the space provided by putting "✓" mark.
3. For any additional opinion or explanation, you are kindly requested to write your opinions as briefly as possible in the space provided.
4. Please follow the specific instruction of the beginning of each section and try to read each before attempting to complete it.

Thank you in advance for your co-operation

Part One:

Background Information

Direction: Please indicate by marking "✓" or by writing short answer on the space provided.

1. Name of Sub-city _____
2. Name of the School _____

   2.1 Clustered ( ) 2.2 Non-clustered ( )
3. Name of cluster schools resource center _____
4. Your job position _____

5. Sex Male ( ) Female ( )

6. Work experience

6.1 1-5 ( ) 6.2 6-10 ( ) 6.3 11-15 ( ) 6.4 16-20 ( )

6.5 21-25 ( ) 6.6 26 and above ( )

6.7 Number of service year in this school

6.7.1 1-2 ( ) 6.7.2 3-4 ( ) 6.7.3 5 and above ( )

7. Academic Qualifications

7.1 12 complete ( ) 7.2 12+TEI ( )

7.3 12+ Diploma ( ) 7.4 B.A/BSC

8. Teaching load (Period)

8.1 10-15 ( )8.2 16-20 ( ) 8.3 21-25 ( )

8.4 26-30 ( ) 8.5 30 and above ( )

9. Subject taught _____

10. Grade you teach _____

10.1 1st cycle ( ) 10.2 2nd cycle ( )

11. How far is your school from your cluster resource center? ___ km.

11.1 0-1 ( ) 11.2 2-3 ( ) 11.3 4-5 ( )

Part Two: Main research questionnaire

2.1 Contact cluster school training center

No	Item	Yes	No	Undecided
1	Did you have the chance to share your experience in the training centers?			
2	If you response for question number 1 is "Yes" at what level? a. at your school _____ b. at sub-city level _____ c. at Addis Ababa Education Bureau level __ d. at cluster resource center _____	 ____ ____ ____	 __ __ __	 _____ _____ _____

2.2Assessment of professional experience sharing

Indicate the area or topic of training you shared your experience? Please put priority for each

S.N	Items	Agree	Not sure	Disagree
1	Continuous assessment based on students activity and performance			
2	Student centered approach			
3	Teaching in a large classroom			
4	Civic and ethical education			
5	Lesson plan preparation			
6	Action research			
7	Preparation of teaching materials from locally available materials			
8	Increasing students enrollment and decreasing wastage of education			

2.3 Contact cluster schools center

	Utilization of CRC by stakeholders Items	Always	Not at all	Occasionally
1	How often did you!- a. Utilize teaching aids made at CRC_____ b. Prepare teaching aids at CRC _____ c. Evaluate supplementary materials at CRC_____ d. Utilize reference books provided by CRC-	____ ____ ____ ____	____ _ ____ _	_____ _____ _____ _____

2.4 Activities of Satellite Schools in Facilitating CRC Materials

The following questions are related to the activities of your school please put a "✓" mark under the given options

	2.2 Resource utilization by member/satellite schools **Items**	**Yes**	**No**	**Undecided**
1	Are supplementary materials and reference books distributed from CRC displayed in clustered (satellite) schools so that teachers can easily get and utilize it?			
2	Are posters displayed in members /satellite/schools, so that teachers could easily see and develop their awareness			
3	Have you ever been provided with modules/materials that were helpful to develop your profession?			
4	Do clustered (satellite) schools utilize duplicating machine and other scarce materials equally among themselves?			

2.5 Perception of Stakeholders on the Activities of School Management

S.N	**Items**	**Good**	**Fair**	**Poor**
1	Facilitate professional training in the school			
2	Facilitate community participation in school improvement			
3	Adjust condition for mentoring program			
4	Supervise classroom instruction			

2.6 Impact of CRC in Promoting Learning at Cluster Schools

S.N	**Items**	**Scale**		
		Highly improved	**Some what improved**	**Not improved**
1	Drop out rates			
2	Pass rate			
3	Students activity in the teaching learning process			
4	Teachers competence regarding the subject they teach			
5	Women's participation in the teaching learning process			

2.7 Factors which Hinder the Effectiveness of CRC

	Hindrance	Degree of hindrance for expectation				
		VL	L	M	H	VH
1	Absence of commitment to work collaboratively with colleagues					
2	Lack of follow up and monitoring from school directors					
3	Lack of adequate resources					
4	Absence of cooperation from parent teachers association					
5	Fail to teach the participation of the community in school improvement program					
6	Reward for good performance					
7	Accountability					
8	Inculcating spirit of competition					

Key: VL = Very Low, L = Low, M = Medium, H = High, VH = Very High

Appendix 2

Addis Ababa University

College of Education

Department of Curriculum and Teachers Professional Development Studies

Classroom Observation Checklist

The main purpose of this observation checklist is intended to assess primary school teachers' performance at the result of teachers development program in cluster schools resource center. There are 34 performance indicators.

Steps the observer should follow.

Step 1: Use a copy of the checklist for each observation.

Step 2: Describe in writing what was observed on the space provided.

Step 3: Record Yes/No on the basis of classroom condition.

Step 4: Use five-point-scale to measure the performance of the teacher by putting a thick mark in the appropriate column to indicate rating.

Teaching Performance Observation Checklist

Cluster schools center _____ Class size _____

Sub-city (Kifleketema) _____ Boys_____

Kebele _____ Girls_____

Teachers name _____ Period_____

Qualification _____ Date _____

Sex _____ Time _____

Grade level _____

1	Classroom condition for teaching	Yes	No	Undecided	Comment
1.1	Is there adequate space for movement between desks?				
1.2	Is the number of students or class size appropriate?				
1.3	Are the desks and chairs easily moveable?				
1.4	Is there enough light in the classroom?				

2	**Lesson planning**	**Very adequate**	**Adequate**	**Average**	**Inadequate**	**Very inadequate**	**Comment**
2.1	Formulates lesson using goals and objectives						
2.2	Relates instructional objectives to contents of the lesson						
2.3	Incorporates appropriate evaluation procedures						

2.4	Develops lessons sequentially						
2.5	Correspondence of content and learning activities						
2.6	Specification of appropriate resources and teaching aids for the lesson						
3	**Communicating the lesson**						
3.1	Effective oral communication						
3.2	Interpersonal communication						
3.3	Communicating in writing						
3.4	Non-verbal communication						
4	**Knowledge of the subject matter**						
4.1	Mastery of the content						
4.2	Ability to decide on appropriate method of teaching						
4.3	Ability to link lesson content to previous lesson content						
4.4	Ability to answer most of the normal student questions on the topic						
5	**Implementing the subject matter**						
5.1	Arrangement of teaching materials prior to lesson implementation						
5.2	Using of a method(s) which motivate students to find for themselves information, applications, explanations, links etc.						
5.3	Students direct participation in the lesson by way of role play discussions, project work, group work, dramatization						
5.4	Using of a method(s) to encourage and facilitate the development of practical skills						
5.5	Teachers' ability to vary the kind of activity during the lesson						
5.6	Teachers' ability to use non-verbal communication such as gesture. Posture and facial expression effectively to promote learning.						

6	**Instructional materials and resource**						
6.1	Using planned resource effectively						
6.2	Using appropriate materials to the topic						
6.3	Using a variety of material						
6.4	Utilizing cluster school resources						
6.5	Teachers' effort to enrich his/her lesson by using self made teaching aids from locally available materials						
6.6	Students participation in the preparation of teaching aids						
7	**Evaluation**						
7.1	Giving enough class work or homework to the students at the end of the lesson						
7.2	Monitoring of class performance and individual performance by moving form desk to desk						
7.3	Ability to give feedback to students about their performance by way of correcting their assignments						
7.4	Ability to keep adequate record of continuous assessment, results of students						

Appendix 3

Interview Guide for Principals and Officials (Semi Structured Interview)

1. How do CRC's organized in Addis Ababa?
2. To what extent do you say
   - Collaborative work in CRC improved the teaching learning process?
   - CRC linked to Addis Ababa Education Bureau?
   - CRC linked to KCTE
3. Would you please explain the training items given to teachers to improve learning in CRC?
4. Would you please explain how the Bureau promotes cluster school review?
5. Was there any follow-up and monitoring program conducted by the Bureau?
6. What service does CRC give to member schools?
7. What support do you get from AED/BESO II project?
8. How do you evaluate the activities of teachers in CRC?

Appendix 4

Check List for Availability of Necessary Teaching and Supplementary Materials in Clustered (Satellite) Schools

No	Type or Available teaching and supplementary materials	Yes	No	Qt. if 'Yes'
1	Supplementary readers to enhance reading and comprehension skills. Grade level KG-2 to 9 and above			
2	Games, kits			
3.	English - The magic school bus (grade 7 and 8) - Inside the earth-life - Inside the human body-digestive system - Inside the ocean floor - Folk stories (Grade 3-4) etc.	____ ____ ____ ____ ____	____ ____ ____ ____ ____	_____ _____ _____ _____ _____
4	Environment (ሥነ-አካባቢ) Grad 1-4 - Environmental education (supplementary book)			
5	HIV/AID's			
6	አሳታፊ የመማር ሂደት ተግባራዊ መመሪያ Teachers module-Grade 5-8			
7	አሳታፊ ትምህርት ተግባራዊ ናሙና Module- 2U-Grade 5-6			
8	ተከታታይ ምዘናና የአጠቃቀም መንገዱ Teachers Module 3-Grade 5-8			
9	ሥርዐተ-ፆታ ነክ ጉዳዮች- ለሁለተኛ እርከን መምህራን Grade 5-8 Teachers Module 4			
10	የኤች አይቪ ኤድስ ትምህርት ለክፍል ውስጥ ትምህርት ወይም ለትምህርት ቤት ክበብ የሚጠቅሙ ክንዋኔዎች Grade 5-8			
11	ብዙ ተማሪዎች ባሉበት ክፍል ውስጥ የቡድንና የጥድ ሥራዎች ለመተግበር የሚያስችሉ አንዳንድ ምክሮች Teachers module 5-8			
12	Sample activity learning activities Teaches module 2B Grade 7-8			
13	Poster Example If you want to be a good instructional leader, be ...			
14	HIV manual for teachers Grade 5-8			

15	ሥነ-ዜጋና ሥነ-ምግባር ተማሪ ተኮር ተሣትፏዊ ዘዴ (ለመምህራን)			
16	አጋዥ የሥነ-ዜጋ ትምህርት ተማሪን ያማከለ For teachers Grade 7-8			
17	Civic			
18	Environmental science			
19	Poster A 3			
20	Poster A 4			
21	ራስን መምራት			
22	የሴቶች ሀይል ጥቃት መምሪያ			
23	በትምህርት ቤት ተሣትፎ ማሳደግ			
24	ሥርዐተ-ፆታን መመዝገብ			
25	ሥርዐተ-ፆታ ትምህርት			
26	እርስ በርስ መግባባት			
27	የመ.ያ ምክር			
28	Study skills			

Strong point_____

Weak point _____

Appendix 5

Guide Lines for Good Practice in Conducting Focus Group

- Find a suitable location for the group some where quiet and comfortable for participants.
- Put people at ease with an informal, open approach –ensure they do not feel that they are under scrutiny
- Make sure that they are under scrutiny
- Make sure that every one gets affair chance to speak
- Encourage interaction between group members but keep them on the subject
- Prevent group members from pressuring other to agree with them
- Do not rely on one focus group to represent a whole group of people's point of view it is much better to do more, to guard against à 'rouge' group going off at a tangent
- Remember that the data collected relates to the group, not the individuals in it.

Appendix 6

Guide Lines for Good Practice in Using Documents

- Keep you own research focus clearly in mind as you work on the documents.
- All information must be carefully assessed for credibility-look for possible sources of bias or error
- Look out for what is not there
- Any re-analysis of existing data should be undertaken with advice from statistician in the case of figures, and an experienced researcher in the case of qualitative data.