THE CONTRIBUTION OF SCHOOL CLUSTER SYSTEM IN ENHANCING PROFESSIONAL COMPETENCE OF TEACHERS: A CASE OF PRIMARY SCHOOL TEACHERS OF NORTH SHEWA, AMHARA REGION

BY

ABRAHAM EMBAYE BERHANE

A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES OF ADDIS ABABA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN CURRICULUM AND INSTRUCTION

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TABLE OF CONTENTS

CHAPTER FOUR

CHAPTER FIVE

ACRONYMS

AED/BESO- Academy for Education Development/Basic Education Strategic Objective

ADA- Amhara Development Association

CRC- Cluster Resource Center

DBTTC- Debre Birhan Teachers Training College

NETP – New Education and Training Policy

NCRC- Non Cluster Resource Center

NGO – Non Government Organization

AREB – Amhara Region Education Bureau

ABSTRACT

The main purpose of this study was to examine the contribution of school cluster based trainings in enhancing professional competence of primary school teachers in North Shewa Zone of Amhara Region. The research attempted to answer four basic research questions. A causal-comparative research method was employed. Besides, four groups from four Woredas were selected for this study. These groups were: 1-non-NGO support receiving CRC teachers group from Ankober Woreda, 2-BESO (Basic Education Strategic Objective) supported CRC teachers group from Basona Worana Woreda,3-ADA (Amhara Development Association) supported CRC teachers group from Moretna Jirru Woreda and,4- non-CRC participating teacher group from Minjar-Shenkora Woreda. From these groups, the non-CRC participating teachers group was considered as control group to compare the contribution of CRCs. The non-NGO support receiving CRC group also served as control group to measure the contribution of NGO interferences in CRCs. From the four sample groups, eight schools (two from each) were reached and a total of 52 (40.3 percent) primary school teachers were selected based on availability sampling techniques. To meet the purpose of this research, four types of data collection instruments; training inventory form, document & classroom observation rating scales, questionnaire and interview guide were utilized. The collected data was also analyzed using percentage & mean scores. Besides, comparison was made between each experimental and control groups using one-tailed t-test .The result shows that the package of training provided was found to be consistent with the planned training topics. In addition, it was found that in nine out of eleven performance indicators utilized, CRC participating teachers exhibited mean scores of above the expected mean which indicate that the training in CRCs has brought the desired impact on professional competence of primary school teachers. In comparing attained mean scores of CRC participating teachers with that of non-CRC participating teachers, the positive difference recorded by CRC participating group was a result of participating in CRC. The attained mean scores of the three CRCs participating teachers groups revealed that NGO supported teachers groups exhibited better performance than the non-NGO supported CRC teachers group. Moreover, the varied supports given to CRCs resulted in varied results of teachers' performance. Finally, the finding of this study proved that school cluster system contributed in improving the levels of competence of teachers in the study areas of this research.

CHAPTER ONE

1. Introduction

1.1 Background

It is clear that education can benefit children and its society best when it is relevant and quality. Concerning this, UNESCO's report (2005:28) put it, as "... the achievement of universal participation in education will be fundamentally dependent upon the quality of education available." The attainment of quality education can depend on various factors. Out of these, the availability of professionally equipped and motivated teachers is one factor.

Likewise, the New Education and Training Policy (NETP) of Ethiopia appreciated that one of the four major problems of the country's education is quality education (NETP; 1994). The document has also given direction the necessity and implementation of pre-service and in-service teachers training to improve professional competence and ethics of teachers (Art. 3.4, p. 20). Melaku Yemam (2002), has also underlined the necessity of training and retraining programs of teachers through in-service programs.

Moreover, in Ethiopia, teachers' professional capability and effectiveness to render quality education is becoming onerous duties. In relation to this point, ICDR (1999:1) stated that "since the introduction of integrated curriculum in the school system, teaching in primary level has become more demanding of the teacher's skills, capability and professional competence." Generally, according to UNICEF (2004), teacher quality is now seen as central to education quality.

To respond for such demand positively the creation of a forum suitable for continuous professional development is necessary. By considering this fact together with decentralized school system, grouping of nearby schools for the purpose of retraining has become reality in some regions of Ethiopia. This grouping of nearby schools is known as school clustering.

According to UNICEF (2002), in Ethiopia this school clustering started in Harari Region in 1999 upon the initiation of UNICEF. Then, the experience has been disseminated to Amhara and Tigray regions.

Presently, Amhara Regional Education Bureau (AREB) has established various school cluster systems to bring better teachers' competence. According to AED/BESO (2005:4), "school clustering support program in the Amhara region TEIs (Teacher Education Institutions) was started in 1992 E.C." This same resource indicated that North Shewa Zone Education Office with Debre Birhan Teachers Training Institution had been one of the first in Amhara Region to begin school cluster system.

So far, AREB organized schools under the name of Cluster Resource Centers (CRC)in scaling up the experience. Now, there are 135 CRCs in 20 Woredas of North Shewa (according to the reports of the education office of North Shewa). These CRCs are established and have performed their activity under clear guidance set by AREB. On the necessity of CRCs, the Bureau asserts (in its Amharic version of CRCs guidance) that it is necessary to make schools focus on mutual professional support activities so that they can provide relevant education. This document had listed down schools problems to be tackled through CRCs. Among the problems, most of them are related with teacher performance and motivation which can be explained in the discussion of teachers' professional competence. Besides, this guidance document made clear the number of schools organized in one CRC. Thus, there are 3-7 primary schools in one CRC of rural areas and a maximum of 3 schools in urban areas AREB (1997).

In supporting CRCs of the Zone, the intervention of three bodies-AED/BESO, ADA (Amhara Development Association), and the Government (through AREB) - have taken part in the intervention.

1.2 Statement of the Problem

Framework of the elements of training and retraining in CRCs are designed based on the articulated professional problems of teachers. This can provide us with planned training curriculum package of CRC. Thus, firstly, it was necessary to equate this planned training curriculum package of CRC with the implemented one so that we could better explain the contribution of CRC to professional competence of teachers.

It is assumed that many teachers have taken part through the implementation process of CRC's training in the Zone. Therefore, it became necessary to examine the contribution of this training on teacher's performance. Besides, the establishments of CRCs have aimed at upgrading

teachers' performance. Nevertheless, researches investigating the contribution of CRCs to professional competence of teachers have not been seen so far.

As there are two organizations, besides AREB, that have supported CRCs of North Shewa of Amhara region, it was also necessary to search out the differences of their contribution so that we can see the varied impacts made as a result of varied input.

In all these cases, what the impacts of CRCs on professional competence of primary school teachers in North Shewa zone is an important problem to be studied. In this problem the supports given to teachers in each CRCs was considered as independent variable where as teachers professional competence was taken as variable dependent on supports delivered through CRCs.

1.3 Basic Questions of the Research

Within the framework of the statement of the problem given, this research tries to answer the following basic questions regarding CRCs of North Showa in Amhara region.

i) Does the training curriculum package of CRCs in line with the teachers' professional problems identified by Amhara Regional Education Bureau?

ii) Do professional competence of CRC participating primary school teachers better than those CRC primary school teachers without CRC?

iii) Do professional competence of CRC participating primary school teachers with NGO support better than those CRC participating primary school teachers without NGO support?

iv) Is there any difference in professional competence of primary school teachers as a result of varied intervention of different organization in CRCs?

1.4 Objective of the Study

The purpose of this study is to examine the contribution of existing CRCs activities in enhancing professional competence of primary school teachers in North Shewa of Amhara region and contribute to the effort being made in improving teachers' professional competence. To attain its purpose, the research has the objectives of this study include:

a) to compare the expected and implemented CRCs training package;

b) to investigate the contribution of CRCs training activities on performance of primary school teachers of North Shewa of Amhara Region as compared to non CRC participant teachers' performance;

c) to examine whether the expected professional competence of primary school teachers attained as a result of participating in CRCs or not;

d) to identify if there are variations of input by AED/BESO, ADA, and AREB in supporting CRCs of North Shewa of Amhara Region;

e) to compare the variations of input or support type made by AED/BESO, ADA, and AREB with the impacts of professional competence of teachers participating in each support type.

1.5 Significance of the Study

The findings of this research will help the ongoing efforts of the provision of quality education through improving teachers' professional competence by identifying strength and weakness of CRCs' on professional development of teachers'. Thus, the findings of this study will contribute positively in revisiting the policy and strategy of schools cluster based trainings to upgrade teacher's pedagogical experiences. Therefore, its result has practical application.

Therefore, the findings of this research will contribute to all the stakeholders involving in providing and utilizing quality education. However, these beneficiaries can be listed as:

- Primary chools & teachers;
- CRCs coordinators and supervisors, and organizations that have supported CRCs;
- Top education officials and experts working in North Shewa zone and Amhara Region;

1.6 Delimitation of the Study

This study focused on the contribution of CRCs training on teacher's professional competence in North Shewa of Amhara region. Thus, to arrive at reasonably convincing finding it is delimited to teachers of primary schools participating in CRC's training for at least two years and to teachers who have not participated in CRCs training in North Shewa Zone. In addition, the study is delimited only to the elements of performance of teachers as they are equated to the objectives of CRCs related pedagogical elements.

1.7 Limitation of the study

In completing this research activity, some problems were encountered. Some of these were presented as follows:

- It doesn't examine/control the contribution of other factors such as school leadership style, individuals own effort, etc that may have possible impact on teacher professional competence;
- The low number of schools that didn't receive any CRC support so far limited the number of sample teachers taken;
- Shortage of enough literature that deals with Ethiopian CRC experiences;
- It would have been more reasonable to collect data about performance of teachers by observing each sample teacher for longer period of time continuously. However due to budget and time factors this couldn't be implemented. This may cast its own influence on the quality of data collected.
- This research could have been further enriched if the cooperation of AED/BESO (now USAID/BEP- USAID basic education programme) added in giving the necessary data. Unfortunately the office was not found cooperative to give data for this research. As a result, the gap was tried to be filled with data found from DBTTC.

1.8 Organization of the study

This research paper is organized in five chapters. Chapter one shows us the general background, statement of the problem, basic questions & objectives of the study, significance of the study, delimitation and limitations of the study. It also indicates how the research paper is organized. Chapter two deals with review of related literature. Chapter three presents in detail the research methodology and techniques employed in the study. Chapter four focuses on the presentation and analysis of the data. This is followed by the subsequent findings of the data and its discussions. Chapter five contains brief summary, conclusion and recommendations. Finally, bibliography and appendices are also included to facilitate easy references.

1.9. Operational definition of Terms

a) NGO support:- is a technical support given to teachers in cluster resource centers to improve pedagogical capacity of teachers so that better classroom performance can be realized.

b) Contribution of cluster school system/CRC: refers to a group of schools that work together to share experiences, resources and training in order to create opportunities for continual professional development (Cummings, Cecilia, & Stephanie n.d.: 3).

c) Performance: is an experience of teacher's activities observed in classroom and school compound in relation to utilizing active learning, action research, and other activities that will improve students learning condition.

d) Professional competence: is teachers' performance related to pedagogical activities. This competence is taken as the function of ability and motivation and refers to the preparation and implementation of lesson planning, active learning method of teaching, classroom management, teaching-learning media preparation, continuous assessment, action research and related pedagogical activities.

e) Simplicity ranking: refers to the perception of respondent teachers in considering specified teaching professional activities with ease to implement in classroom.

f) Difficulty ranking: is the perception of respondent teachers in getting obscure to

Implement specified teaching professional activities during classroom interaction.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

2.1 Introduction

A review of literature concerning activities of school clustering in this paper has tried to reveal the conceptual basis and present conditions of school clustering in Ethiopia. Thus, this chapter presents the review of literature by classifying into two broad categories. The first one deals with the theoretical understanding of school clustering in relation to teachers' professional development and in enhancing teachers' competence. The second category provides us with information of understanding school clustering in Ethiopia and Amhara Regional State Education Bureau. The sequence of the review is presented in such a way that readers can be able to go through the general understanding of school clustering argued by various scholars of the field to the particular perception of this matter.

2.2 Theoretical Understandings of School Clustering.

The Concept and Models of School Clustering System

As Cummings, et al. (n.d.: 3) put it "a cluster is a group of schools work together to share experiences, resources and training in order to create opportunities for continual professional development, necessary for acquiring and retaining the teaching license ." Thus, school clustering system is a kind of networking of schools & teachers working in those schools cooperatively. The network is used as a practical means of enhancing teachers professional development responding to the local classroom- school needs. Leu (2004) considered school clustering, as a localized in-service teachers training forum.

In such kind of program teachers themselves take the responsibility to facilitate the activities. In addition, self reflection, collegial learning through active participation is vital to effectively realize the designed activities. Leu (2004:3), reported that "At the heart of most programs [of cluster] are the ideas of reflective practice, communities of learning, and communal problem solving." By continuing her argument she identified the focus on active learning and the use of higher order thinking skills are central in this program. The demand for reflective activities needed in school clustering is also confirmed by Cummings, et al (n.d.:13). Similarly

AREB,(1997 E.C.:2), stated that school clustering came into existence, historically, due to the increasing need of student-centered teaching- learning activities and new teaching methodologies. These demands can possibly be responded positively if the previously acquired pre-service knowledge and skills are updated through such localized school cluster program. Hence, school clustering as a system has its own goals, objectives, and also purposes.

After approbation of the importance of school clustering for in-service teacher professional development, various implementing models are presented. For instance; MacNeil, (2004), suggested two models of school clustering. These are self-organized school development model in which the school with its teachers is considered as provider of the training services; and model of networking, and inter-school collaboration through which teachers share experiences and resources with each other within a single school and amongst schools.

Cummings, et al (n.d.:5&6); also provided us with five models of school clustering. These are:

1. ***Cluster schools within 8 kms:-***In this model, primary schools are made to be clustered around one central primary school. Thus, the distance of each cluster-member school supposed to be within 8 Kms radius from the center. In this model school training needs are identified by cluster management group, and training is given by identified skilled teacher at cluster center or through rotating in all schools.
2. ***TEI [Teacher Education Institute] model***. This model requires primary schools to be clustered around near by one central school called schools-cluster center; and each schools- cluster center will create formal link with TEI. Here training needs are identified by schools & relayed to the TEI cluster coordinator. Thus training is given by qualified TEI staff. Whereas, the training is given at cluster center level. And, of course, around each school cluster center, there are cluster member schools.
3. ***Outreach model***:- in which training needs are identified by schools and tutors through close contact. Then, training is given through outreach tutors, competent and motivated primary teachers under the supervision of TEIs or Education offices. The training can be made at individual school or cluster center. In this model there is a clearly identified center of schools cluster. Coordination is made either by TEI or education office of woreda.

4. ***Isolated schools, self study model***:- Here, identification of training needs & training activities are made at school level. In this model training is given through identified key teacher or experienced teachers. This model doesn't actually demand one primary school to be linked with the other/s for the purpose of training. Everything will be done within a single school; however, there is a follow up from woreda education office.
5. ***High school model*** – which is suggested for equal status of high schools. Hence, there is no one permanent school-center serving as cluster center. Training is also made by rotating through member high schools.

To add more, by acknowledging USAID: A review of school cluster in Ethiopia, AREB, (1997E.C.) mentioned three types of models. These are hierarchical, horizontal, and hybrid model. In hierarchical model each cluster member school is supposed to be under the communication link of the cluster center only. This center is selected based on its better resource & experience. Thus this model seems similar with the model of 'cluster schools within 8Kms' suggested by Cummings, et al. Whereas, it was assumed by AREB as it lacks an easy exchange of experiences among similar status of schools without the help of the cluster center. Besides, it may also create low emphasis on the sense of collegial relation ship. This model is said to be advantageous to share resources and for follow up purposes.

In horizontal school cluster model, each school within one cluster system has equal status with any of the other in all the activities. There is a horizontal relation among cluster member schools. It creates a feeling of mutual understanding and responsibility among teachers of member schools. In this model schools are organized in a cluster based on their proximity regardless of their resources and capabilities. Therefore, their might be absence of enriched experiences and resources among member schools. In addition, it lacks a responsible coordinator (no any member school is assigned to a coordinating role).

The third, hybrid model of school clustering is the integration of the two (hierarchical & horizontal) models of school clustering. It tries to maximize the advantages of school clustering by mixing up the positive sides of the models cited above. Therefore, member primary schools have horizontal relationships in addition to their respective relation with the school selected as a resource center.

Justifications for the need to school clustering

The increasing need of schools to provide quality educational services demanded schools and their teachers to be engaged in a continuous educational services improvement program and life long learning activities. In this case teachers have to respond to the localized & immediate need of classroom activities. In connection to this argument, as it was cited by MacNeil (2004;1), Warwick and Reimers (1992), conventional teachers education in general has been shown in many cases to have little impact on teacher learning or subsequent classroom instruction. In similar understanding, Eraut, (1944:12) asserted that there is little sign of initial professional education helping teachers to solve practical problems. However, Ahmed (1994) recognized that teacher education (in reference to pre-service training) plays a decisive role in implementing curriculum changes and innovations.

Concerning this debate there are writers arguing on both sides. Indeed, the extensive literature dealing with this issue, both pre-service & in-service are found to be reciprocal programmes for success of teaching learning activities. For instance, Criag, et al. (1998:13), after studying the case of five developing countries (Namibia, Botswana, South Africa, Guatemala, & Pakistan), considered, "... teacher education [pre-service] and related support within the school system was major contributing factor to higher students achievement and retention." In similar way, Villegas-Reimers (2003) went through this issue in a modest way by arguing like pre-service training is necessary as the first step of professional development and needs a subsequent support that enabled teachers handle practical classroom problems. Almost in the same context, in esdp and Amhara REB (1999) it was reported that developing and materializing an inbuilt program is needed to develop the knowledge and skill of once trained and deployed teachers.

Such problem is assumed to be solved or minimized by engaging teachers in a lifelong professional development activities According to Khaniya (1997), different pilot projects [in enabling teachers perform well] have shown that the RC [school cluster] could be useful for training teachers, without taking them away from the schools, in cost effective manner. By concluding that large-scale in-service teacher training schemes are unsustainable and rarely translated into instructional gains; Mac Neil, James D, (2004) argued that school and cluster based in service teacher professional development programs have been offered as promising alternatives. In the same way Leu, (2004:3) confirmed on the importance of school-and cluster-

based teacher professional development by writing like, localized teacher in-service of this type [school – and cluster-based] provides ongoing professional development activities for teachers that take place mainly at the local level. Besides, in the working paper of school clustering MacNeil, (2004:3), provided us experience base justification by stating . "….. ,many countries have developed or are currently developing school based or cluster- based in service programs (SITPD) [school based In-service Teachers professional Development] as an important means of updating teacher skills and providing professional support ." UNICEF (2002) also stated, in the case of Ethiopia, as professional development of teachers through school clustering is also a strategy to provide low cost supplementary training to complement pre-service training and to influence classroom practices.

Teachers Professional Development

Teaching as a profession

Profession is defined by Cambridge International Dictionary of English "any type of work which needs a special training or a particular skill often one which is respected because it involves a high level of education." Based on this definition teaching can be considered as a professional activity. However, beyond considering teaching as a profession in a literal way, the concept or understanding of profession itself is debatable. Nevertheless, according to Eraut, (1994), the debate is most clearly focused around the concept of an ideal type of profession. Thus, he treated professionalism as an ideology. Besides, Ibid (2) identified that profession emphasizes on moral polity, service occupation , and codes of conduct. In this case also, due to the functional nature of teaching that incorporates moral aspects, delivery of educational services which is guided by some guiding code of conduct we can consider that teaching is a profession. According to him, teachers occupation has a long history. Moreover, the work of professions can be viewed in terms of several interconnected sets of power relations, with service user with managers of service providing organizations, with government, with a range of special interest groups and with other professions. By continuing his argument , Eraut , m.(1994) argued that in order to make good decisions within profession-centered approach, a professional needs to be a good investigator, knowledgeable about options , able to reason critically and able to learn from experience. Likewise, a teacher as professional is expected to make wise decisions by identifying problems related to teaching -learning activities and implementing the decision. Such decision

will be used as means /experience for further learning of the teacher. Ministry of Education of Ethiopia expressed professionalism in terms of the principles of creativity, knowledge & skills, collaboration & cooperation, and positive attitude (ICDR, 1999).

The need for professional development in Education

The dynamic nature of education and complex condition of learners at classroom demands a continuous engagement of teachers in professional development. Besides, to respond to the changing general condition of the society, general educational reform may also be made. This by itself also demands subsequent teachers' professional development. Regarding this, Villages-Reimers, (2003:13) wrote as, "Most educational reforms currently being designed and/or implemented include a component of teacher professional development as one of the key elements in the change process''. Since educational reforms are made to meet the prevailing demands of the society which is expected to be supplied as educational service, the profession is expected to look after varieties of new knowledge & experiences within the educational activities in particular and outside the educational activities in general. In the same understanding, Borko, & putnam (1995:37) stated as follows:

> Current efforts to reform educational practice, which are originating from a variety of sources within and outside the education community, are calling for teachers to teach in new ways – ways that differ substantially from how they differ substantially and how they learned to teach.

Thus, teachers' professional development is needed, as Villegas–Reimers (2003) argued, because a significant number of teachers throughout the world are under- prepared for their profession. Within this context, Guskey (1997) asserted that teachers' professional development is designed & implemented to bring higher level of students learning and achievement. By appreciating such statements we can say that teachers' professional development is needed to feel the gap of teacher's professional competence. This gap may be created due to theory dominated pre-service teachers training and/or growing needs of the society as a result of continuously growing knowledge & technology.

In this view, teachers have vital role in provision of quality education service. Thus, it is clear that the presence of school teachers would be relevant as long as she / he can meet this demand.

In the context of this service, Ambissa (2001), by citing the work of Weeden and Tisher (1999), identified continuous professional development through in-service program as one of the necessary factors.

Some Perspectives of Teachers Professional Development

Teachers' professional development may be viewed from various perspectives. The range of these variations may extend from the conception of teaching by the teachers themselves to the articulation of teaching profession by scholars. For example: Villegas-Reimer, (2003:31), wrote that "views on the role of teachers are culturally and socially embedded, and teachers' own perspectives of their role and profession are affected, by the conception of teaching that is prevalent in their societies".

Thus, varied views may be seen in the literature of teachers professional development. In International Review of Literature on this issue Villegas-Reimers,(2003), identified that the variations may begin from considering teachers as professionals as opposed to mere 'workers' and whether it is a profession or an ' occupation '. However, after discussing the arguments given by so many writers, in the international review of literature of professional development, Darling-Hammond in Villages-Reamers (2003) stated that there is a growing acceptance of teaching as a profession and, consequently, the transformation from teacher-training to teacher professional development.

Viewing teaching profession further, Villages-Reamers looked at three views. The first view, by citing Calderhead, (1995); identified the work of teachers as clinicians . According to this view teaching is regarded as a process of problem - solving and decision - making similar to the processes followed by physicians. Following this consideration, teachers professional development programmes have focused on developing teachers' knowledge (of children, the curriculum, teaching strategies, school facilities, and educational objectives) and of particular skills. Such skill is expected to help teachers to construct learning activities that can be implemented in the classroom and will allow them to support students individually and in a group. Within this view, some researchers have made differences of teachers as novice- the beginner. And the expert teachers- mentor.

The second view considers teachers as researchers. This view, as it was cited by Villagas-Reimers, (1995) advocated for teachers to be engaged in improving their practices, change the situations in which they are working and understand their practice within the large society. This is what to be accomplished presently through action research. Such view was indicated as it was popularized by Curriculum Reform Movement of 1980's in the United kingdom.

Finally the idea of considering educators as simple worker of teacher worker is criticized as it limits the views of teachers development necessary to indulge the multiple demands of younger generation necessary to positively contribute in the their society.

Another scholar, Andy Hargreaves, has presented teachers professional development in terms of three views. These are: symbolic interaction, critical social theory, and theories of post modernity. Further, he extended his discussion by looking at teachers professional development from four dimensions.

Hargreaves, (1995) discussed the above three theoretical perspectives in detail. The first one is symbolic interactionism. As to Hargreaves (1995:9-34), "This perspective helps clarify why teachers (and others) do what they do. It addresses practical realities rather than holding people to prescriptive ideals or moral exhortations concerning human change and development" Further, it is elaborated that in symbolic -interactionism, "teaching is more than a set of technically learnable skills: It is given meaning by teachers' evolving selves, within the realistic contexts and contingencies of their work environments.'' (Hargreaves,1995:11). In addition, this perspective highlights the importance of shared culture of teaching, common beliefs & perceptions among subgroups of teachers. As Hargreaves's considered it, the common beliefs and perceptions are based on commonly faced problems. The same author has confirmed that "symbolic interactionism tends to confine itself to the immediate settings of social interaction, such as schools, classrooms, staffrooms, and communities that are clearly bounded in time & space".

On the other hand, critical social theory focuses on the worlds outside the immediate settings. This theory, states that economies are important in powerfully shaping the work of teaching. Besides, it is considered that it is sensitive to the contexts of human interaction and the power relationships that comprise and surround it (Hargreaves, 1995).

The third perspective, stated by Hargreaves (1995), was theory of post modernity. This perspective according to the writer, adds a dynamic element i.e the demand for flexible skills in response to flexible technologies, to understanding the contexts of teachers development. After visiting the works of others, Hargreaves (1995:12) stated that "these flexible economies are calling for the more flexible skills among future work forces-and a flexible pattern of teaching, learning, and schooling through which such skills can be developed." Moreover, it is asserted that in this perspective fixed rules and segregated roles are replaced by a focus on tasks and projects, utilizing collectively available skills for their completion. Besides, self-managing schools and professional development networks are realizations of these emerging tendencies.

In discerning aspects of teacher professional development; according to Hargreaves, various dimensions of teaching activities have to be given due emphasis. This is because good teaching is not merely a matter of teachers mastering the skills of teaching and the knowledge of what to teach and how to teach. It is beyond this. Thus unless some other dimensions of teacher development are incorporated, we may not be successful in out-teachers professional development. In relation to this point, Hargreaves (1995:13) Stated: "Success in Knowledge – and skill–based endeavors in teachers development remains insufficient and elusive, however. When exposed to or trained in new knowledge and skills, teachers often resist or reject them, select only the bits that suit them, or delay until other innovation supersede them."

Due to this condition other dimensions of teachers development should get due emphasis. Hargreaves, (1995), also asserted for the need to moral, political, and emotional dimensions of teacher development that help make good teaching.

Teaching has moral purpose. Thus, if the moral dimension is considered teachers development activities can help teachers articulate and rehearse resolving moral dilemmas in their work through reflection of own work, observing other teachers practices, or studying case example. (Hargreaves,1995). In this respect, teacher's professional development may help to create the conditions of work and cultures of collaboration.

Indeed, political aspects should also be incorporated in teachers professional development. According to Hargreaves (1995), politics is not specifically about organization and representation. It is about power in general as it is existing within classroom. For example, as it is

reported by him, when topics or project work are structured more around the interests of boys or girls, this is political. Such consideration of political aspect in teacher development is related with critical reflection of teachers. In attending the political purpose of teacher development, in the works of Hargreaves, it is believed that collaborative teachers work contribute much to empower each other among colleagues, to long lasting rather than episodic improvement and to care students learning.

The third dimension of teacher development is the emotional aspect. "Beyond technique and moral purpose, what makes good teaching is desire."(Hargreaves, 1995:21). Here, desire refers to emotion. Further, he considered that:

> "With out desire teaching becomes arid empty. It loses its meaning. Understanding the emotional life of teachers, their feelings for and in their work, and attending to this emotional life in ways that positively cultivate it and avoid negatively damaging it should be absolutely central to teacher development efforts."

Finally, in concluding the discussion, the above writer advice to integrate all of the three dimensions in a balanced way. This is because focusing on technical competences in isolation can make teachers development into a narrow, utilitarian exercise that does not question the purposes and parameters of what teachers do. Similarly, Hargreaves (1995:26) conformed that "focusing on moral purpose and moral virtue alone also has its limitations. Teachers and teacher developers who do this can become pious and grandiose in their pursuit of moral virtue." He also made it clear that political strategies pursued in isolation raise different problem. It is understood from his contribution that the problems may be explained in various phenomena like falling in the trap of careerism and opportunism and the likes.

Thus, to avoid problems arise from such imbalance consideration of dimensions in teacher professional development; Hargreaves (1995:26) wrote "so the different dimensions of teacher development must in practice be addressed together. If desire is a pivotal point of focus here, it can be stimulated and supported only through the teachers development."

Another writer Eraut (1995:234), in the context of client-centered orientation professional development, suggested dimensions of content in professional development to be around three areas. These are subject matter knowledge-related to school syllabuses, education knowledge connected to both theoretical & practical aspects of the teaching processes, and, societal knowledge which incorporates both, the experiential & common sense knowledge about the society.

Thus, based on the available extensive literature on perspectives and dimensions of teachers-professional development, it is necessary to consider the advantage of each eclectically. This is because teacher development can be viewed from different angels incorporating all dimensions to satisfy all stake holders.

Contents and approaches of teachers professional Development in school clustering

Whether we follow one perspective or the other in teachers professional development (TPD), the contents has to be decided. In this regard, in Villega-Reimers,(2003:11) it is stated that "when looking at professional development, one must examine the content of the experiences, the processes by which the professional development will occur, and the contexts in which it will take place." Agreeing with this idea, Borko and Putnam (1995), and Mevarech (1995) confirmed that contents of teacher professional development should incorporate items that enable them to bring changes in classroom activities.

Thus, most of the contents are expected to be technical & conceptual aspects of instruction. This may be explained further in Villegas - Reamers, (2003:39–40), as:

- General pedagogical knowledge: this includes knowledge of learning environments and instructional strategies; classroom management, and knowledge of learners and learning.
- Subject matter knowledge: this includes knowledge of content and substantive structures, (equivalent to knowledge of discipline)
- Pedagogical content – knowledge: a conceptual map of how to teach a subject; knowledge of instructional strategies and representations, knowledge of students understanding and representations, knowledge of student understanding and potential misunderstanding , and knowledge of curriculum and curricular materials.

- Knowledge of student context and disposition to find out more about students, their families and their schools .

- A repertoire of metaphors (to be able to bridge theory and practice)
- Knowledge of strategies, techniques and tools to create and sustain a learning environment / community and the ability to use them effectively.
- Knowledge, skills and dispositions to work with children of diverse cultural, social and linguistic backgrounds.
- Knowledge and skills on hot to implement technology in the curriculum

The above items are inclusive in many suggestions related to the contents of teacher professional development. For example, in Mevareh (1995:153), it is stated "only after teachers mastered the elements of the methods and implemented it successfully in their classes did they reach a stage of positive change in their pedagogical schemata, skills, and beliefs."

However, the suggested contents of teacher professional development vary according to variations of perspectives. For instance, advocators of cognitive psychological perspectives Borko and Putnam (1995) focused on knowledge aspects of teachers to understand and change classroom practice. Whereas, one of a social –psychological scholar, Smyth (1995:86) suggested in his ten – point manifesto of professional development, the contents have to cover:

- Ethical, social, and political context within which teaching occurs.
- Collective & collaborative dimension of teaching , rather than being restricted on reflecting individually
- Educational values.
- Social relationships that improve educational practices
- Mutual forms of accountability
- Knowledge about teaching as being in a tentative & incomplete state , continually being modified by practice
- On wider educational & social reform
- On experiences of schools

Another writer, Leithwood (1992); in Villegas- Reimers, (2003:63), suggested "professional development of teachers should focus on the following.

- developing survival skill [within the teaching profession]
- becoming competent in the basic skills of teaching.
- expanding one's instructional flexibility
- acquiring instructional expertise
- contributing to the professional growth of collegues , and
- exercising leadership and participating in decision-making. "

Whereas, those who consider teaching as crafts concentrate on the technical aspects of teaching-learning processes, while the pragmatic view point focuses on the aspects of practical problems experienced to improve schooling services.

When we come to the approaches of implementing teachers professional development, the existing literature provides us with various methods & models .As it is agreed by MacNeil, (2004) professional development of teachers can be divided into pre-service and in-service teacher training.

The purpose of in-service education & training may vary widely. According to Greenland, in Villegas Reimers, (2003) four categories of purposes are identified. One of which is related to issues of curricular changes in the system and teachers requirement to implement it. The need for further teacher professional development, as it is indicated above, is important to fill the gap between the new demands of curricular change and the already acquired knowledge & experience of working teachers. It is due to this reason that Guskey, and Huberman (1995:1) explained this fact as: "In-service training and other forms of professional development are a crucial component in nearly every modern proposal for educational improvement." Besides; according to Eraut (1995), it is common that the aim of in service teacher education & training is at improving subject matter knowledge. However, he further warned that knowing subject matter alone may not be helpful for classroom activities. In all these debates as it is stated in Educational Administration Glossary: written by Dejnozka (1983), in-service programmes in education generally aimed at instructional improvement. Similarly; as it is cited by Villegas-Reimers (2003), Bolam considered all training of teachers activities offered after initial training to improve teachers professional knowledge, skills, and attitudes so that they can educate children more effectively as in service training aims at.

Within in-service training there are ample choices of ways through which professional development of teachers can be managed. To implement teacher professional development within the framework of in-service program, there are various models suggested by researchers of this field. For instance, nine models were indicated in the literature written by Villages – Reimers (2003). These are:

1. case-based professional development – which uses carefully selected real world examples of teaching for discussions among small group of teachers.
2. self-directed development – which demands identification of one goal by the concerned individual or small group of teachers and take responsibility of implementing by own selves.
3. co-operative or collegial development model which makes small group of teachers responsible for quality
4. observation of excellent practice model that offers teachers the opportunity to observe colleagues who have been recognized for their expertise and excellence in teaching and implement it in the classroom
5. Increasing teacher participation in new roles – which opens door for participation of teachers in affairs of school management, organization, support and monitoring activities.
6. Skill development model – through which development of new teaching techniques and skills such as higher – order questioning, inquiry teaching and group work are the main targets of training.
7. Reflective model :teachers as reflective practitioner - that requires the teachers to pay attention to daily routines of classroom & reflect how they were performed
8. project – based model – which uses a collection of teacher's work in portfolios, action research made by teacher/s and teacher's narratives
9. The generational model, the cascade model or the training – of – trainers models – which demands careful planning of layers of generations up to three layers to be effective in addressing all.

Other researchers, Tillema and Imants (1995) suggest four models of teacher professional development. These models are largely center on cognitive aspects of development. Moreover; Eraut, (1995:246), focused around three types of models which would address the concept of reflective practitioner, curriculum implementation, and centrally planned change. Inaddition, five models are also identified by Hayes, (2004). All of the models suggested by Tillema; Eraut; and Hayes, can be entertained in one way or another within one of the nine models presented in the literature of Villegas – Reimers, (2003).

There are also in-service trainings consisting of workshops or short term courses, & seminars. All these are a one–shot experiences and considered as traditional (Villega-Reimers, 2003). Because such ways of in-service training are considered as one–shot they are said to be not much responsive to the needs of teachers (MacNeil, 2004). Moreover, according to MacNeil , (2004:5); " Teachers now need to be attentive to the psycho-cultural aspects of learning , and effective instruction needs to be more context-dependent." For meeting this demand site , i.e. school based professional development is currently being admitted. Thus, as it is reviewed in MacNeil, (2004); school – based or cluster based in–service programs (SITPD) are considered as an important means of updating teacher skills and providing professional support.

This idea is also strengthen by Eraut, (1994:10) by writing as "professionals continually learn on the job, because their work entails engagement in a succession of cases, problems or projects which they have to learn about.'' This refers to professional development to be school based and to be a life long program. Besides, according to him, classroom context based professional development focusing on professional practices which revolves around routine activities is important. By incorporating some important processes in professional development activities within site based programs; Hayes, (2004-05:22), wrote "professional development has been job embedded, on – site training, with continuous opportunity for mentoring, coaching, and feedback.''

Considering the various perspectives of professional development with the suggested contents, in implementing teachers professional developments through the various models, school – clustered based teacher professional development is vital. That is why it is said that: "site –based in-service teacher professional development is driven by pragmatic, as well as theoretical considerations" (MacNeil, 2004:5). Accordingly, it is explained that, school–and cluster–based teacher

professional development programs have proliferated in recent years in Asia, Africa, and Latin America. Recently reports were made through videoconference, on school based and cluster teacher development by representatives of Namibia, Malawi, Elsalvador, & Ethiopia (Leu, June 2, 2004). All the reports confirmed that regardless of the challenges they have faced, there are promising conditions as a result of the activities.

2.3 School Clustering and Teachers Competence

Educational administration glossary, written by Dejnozka, (1983:34}, consider competence as: "demonstrated ability to perform satisfactorily. It refers to actual patterns of behavior observed in an individual; not to be confused with competencies. " Here, the author consider "competencies as descriptions of expected, needed, or yet to be demonstrated performance."

Since the purpose of this paper is to examine the observable class room performance of teachers as a result of cluster based training, the first definition is taken into account .However, it is also necessary to acknowledge that, there are also other meanings of competence in other writings.

It is made clear in our previous discussion of this literature, that the function of school clustering aims at improving the performance of school teachers so that better quality education service is observed. By dealing with the technical and conceptual aspects of instructions, in school clustering, it is believed that the level of teachers professional competence can be transferred to the higher level. For this to be realized, contents like general pedagogical knowledge ,subject matter knowledge, pedagogical content knowledge, knowledge of student context & disposition, classroom management, knowledge and skills on how to implement technology in the curriculum, and others are given due emphasis. They are considered to be dealt based on (according to Villager-Reamers,2003;Fielding & Schnlock,1985;Beroko, and Putnam; Leithwood ,1992;) need assessment made through performance observation, teachers own demand and expected gaps due to the introduction of new changes in the system. Such consideration is important to bring quality education service through improving teacher's competence level. Bagley, in reviewing a book entitled Developing Competent Teachers :Approaches to Professional Competence in Teacher Education 1996.; made clear that competences are related to a view of knowledge and professional practice. This is also well confirmed by David, (on line),in dealing with questions of competences, by stating like, "Recent debates about improving the practical efficiency and effectiveness of teachers in schools have focused , appropriately enough ,

on question about the sort of professional knowledge and experience which best conduce to these ends."

In assessing the level of competence, normally we should consider and attend the performance of an individual teachers classroom and school practice. This is true because, according to Eraut,(1994:34 &42), practical knowledge is expressed in practice and can be visible to school context while technical knowledge is capable of written codification. This written codification can be used to check the practice against it. In giving more focus on this point, he highlights the importance of carrying out routine procedures. Moreover, according to Eraut , (1994:210), judgment about competence needs evidence collected from observation of performance.

2.4 School clustering in Ethiopia: past and present

Beginning school clustering in Ethiopia &Amhara Region

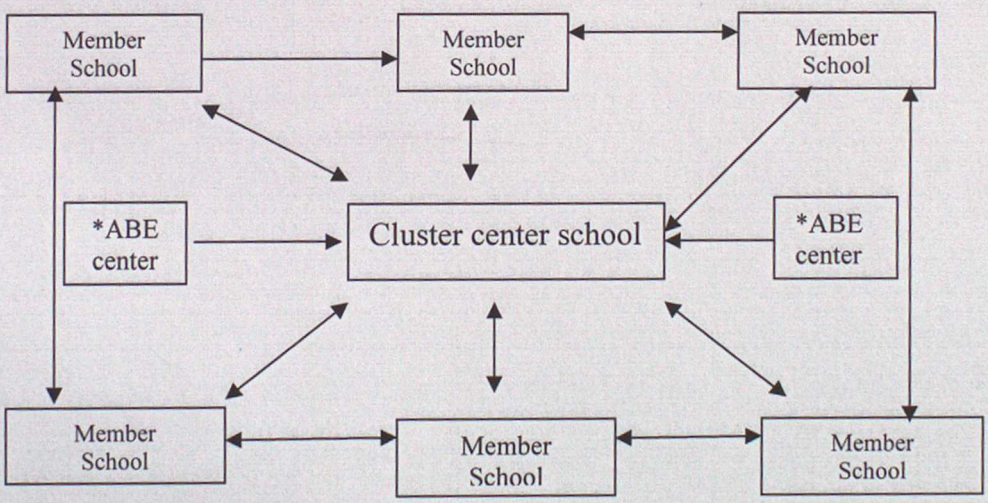
School clustering, in the developed world, started before the last three & four tenth years, to enhance professional competence of teachers in a directions of student centered teaching (AREB:1997 E.C:2). In relations to this point, Assefa (2003:20) stated that; "the term school cluster was pioneered in 1960 in England where small rural& urban schools were in short of subject expertise." Again as Bridges (1993:51) and Morrison (1993:126) indicated, 1980s was marked in UK as a time of shift from higher education based courses to school based in-service program.

Indeed, school clustering in Ethiopia is a very recent phenomenon. Ethiopia's Ministry of Education adopted school-and cluster-based teacher professional development as national policy in 2000 (Leu, 2004). Prior to this, the need for continuous professional development to be implemented, in any of the mechanism, given emphasis by the New Education & Training Policy of Ethiopia (1994) through articles 3.4.6 and 4.2. The subsequent Education Sector Strategy (1994) also appreciated the necessity of increasing the quality and professional competence of the existing teacher as one of the prerequisites to improve educational standards of the country. This is also stated as one of the general objectives of teacher education in Ethiopia. In TESO pre-service Teachers Education Programme document (MOE 2003:5) it is stated that " Establish a system and culture of continuous teacher development programme from Pre-service to In-service education and training using diverse modes of delivery." Moreover, TESO In-service program document (MOE 2003) identified the possibility of implementing continuous

professional development of teachers through school cluster based training activities. Further, Education Sector Millennium Development Goals Needs Assessment: Draft Report (October, 2004) considered school clustering as means of improving teaching condition by responding to the local needs around and in schools.

According to AED/BESO(2005:4), " school clustering support program in the Amhara Region TEI was started in 1992 E.C." This happened after school cluster program being held in Harar was visited by representatives from AREB heads and two TEIs of the region. It is after this visit that AREB declared a guide-line to establish & utilize school clustering as one means of continuous professional development in 1997EC. In addition the Ethio-Italian Development Co-operation ESDR Project Monitoring Unit (PMU) (2005:15), consider school clustering as a means of bringing qualitative improvement of primary education. Finally, in recent documents it is noticed that the school cluster system in Ethiopia has deserved a name Cluster Resource Center 'CRC'. In all these processes, MOE has left the autonomy of choosing school clustering model to the respective regional education bureaus. Following this, AREB selected a hybrid model which integrated the advantage of both vertical & horizontal models.This model is assumed to permit equal status relationship among CRC member schools. However, this is not true in the case of ABE (Alternative Basic Education) center.

A Functional hybrid school cluster Model of Amhara Regions



Source: AREB- taken from USAID: A Review of school cluster in Ethiopia.

*Note: *Alternative Basic Education*

The Rationale of cluster resource center (CRC) in Ethiopia & Amhara Region

In dealing with this topic, it might be necessary to remember what is written in this literature paper. In this part, we noticed that dynamic nature of education and the incapability of the existing teachers to handle the growing needs of students & the society using the previously acquired education and training demanded teachers to be engaged in such kind (cluster) of life long training. In similar way, the curriculum change (in response to the previously identified low quality of the education) introduced as a result of NETP of 1994 incorporated, implementation of new teaching methodologies and new ideas. This can be implemented by teachers who can reorient themselves in such a way. At this point school-clustering becomes necessary. In explaining the need for clustering in Ethiopia, TESO In-service sub- committee (MOE 2003: 14) document stated as:

> It is widely accepted that the teaching- learning process is not static. New concepts, research findings and current classroom approaches and methods have to be combined to take on new forms. Teachers have to assimilate and implement these new trends, and they therefore need to acquire the necessary knowledge, skills, attitudes and professional competencies. Continuing professional development must be seen as an integral part of the teaching profession.

Thus, the above continuous professional development can be realized, as it is suggested in the document, particularly within a cluster of schools. Sharing this belief AREB 1997EC. cluster guide line document asserted that school clustering is needed primarily to build the capacity of primary school teachers continuously in the practical aspects of the profession which is expected from them.

The objectives of CRCs in Ethiopia and Amhara Region.

As it is indicated in TESO In-service Sub-committee document (MOE, 2003), the purposes of schools' cluster programme are stated under general objectives & specific objectives. These are:-

General objective :

- To improve the quality of teaching and learning in Ethiopian schools by means of low cost professional development through the cluster model.

Specific Objectives:

- To promote and sustain professional development
- To provide opportunities for teachers to keep up with changes in education (remain competent in their profession).
- To encourage and assist teachers to produce local teaching materials.
- To enable teachers to localize the curriculum to include their environment
- To facilitate mentoring of the teachers
- To motivate teachers to undertake action research

Cognizant to the general & specific objectives of MOE about CRCs. AREB (1997EC) articulated the general objective as it is to create efficient citizen through keeping the quality of education being delivered. Besides, its specific objectives are presented in four categories: economic, pedagogical, political, & administrative. To the interest of this paper the pedagogical objectives of CRCs in Amhara Region are presented as follows:

- By acquainting teachers continually with up to date teaching methodologies, helping them to improve their profession and then up grade quality of education
- To enrich the curriculum with the existing local conditions.
- To enable teachers utilize modern classroom organization, student centered teaching – learning process, continuous assessment efficiently and through these activities attain the designed profile of student of each grade.
- To create a forum that gives opportunity for teachers of regular schools so that they provide professional support for alternative basic education centers.

Based on the objectives, the purposes of CRCs are oriented to attain the objectives stated. As it is stated, in Amhara region CRCs are supposed to focus on expected pedagogical, economical, administrative and political purposes. However due to the interest of this paper we concentrate on the pedagogical purposes of CRCs.

Expected contents of training in CRCs in Ethiopia and Amhara Region

Contents of training in CRCs are normally expected to be radiated from the designed objectives and purposes of CRCs. The training contents are selected, according to Leu (2004:6); based on assessing teachers needs. This is also confirmed by MOE,(2003); Cummings, et al(n.d.); MOE(2004); and AED/BESO(2005). Thus, the topics are designed & implemented so that teacher will be competent to teach at the appropriate level (MOE, TESO Inservice sub-committee, 2003: 8&16).

Therefore, the contents covered by CRCs have been, according to Leu,(2004:6); "active learning classroom approaches, continuous assessment, promoting the success of girls in school, effective team-building at the school level and effective school leadership, ..., subject – based improvement in teaching and learning,...." Besides, the use of higher – order thinking skills and connecting school learning activities with students own lives has got important emphasis. Thus, according to the report of Leu, the contents are suggested to be circulated around practical & realistic guidance of the teaching learning activities, support for development of curriculum and other aspects of classroom planning & management. This by itself encompasses so many sub-contents. Consistent to this report, MOE, (2004); asserted that improving knowledge of the curriculum, particularly of text books; pedagogical skills; academic knowledge of teachers themselves, especially English, mathematics, and Environmental studies are necessary to be addressed by CRCs. This provide us the package of contents to be addressed in the training of CRCs, which serves as designed curriculum of school clustering programme in Ethiopia.

In similar way, in studying related issues in Oromiya, Assefa (2003:56) listed down the training topics delivered by five regions - Amhara, Harari, Oromiya, SNNPRS, & Tigray. By excluding the frequency of repetitiveness of the topics of each region , the total training topics include :

- Integrated lesson plans
- Teaching aid production
- English teaching methodology
- Science kit use
- self contained classroom methodologies
- Supervision guidance & counseling
- Lesson plan preparation
- School leadership

- New curriculum
- continuous assessment
- Girls participation &
- Music & drawing

The topics of trainings have said to be similar by Assefa (2003). He argued that "comparing training topics the selection is not decentralized as REO managers profess. Most often cited training topics are teaching and development, followed by guidance, science kits and use of new curriculum by teachers." Assesfa, (2003:56). However, this might be due to the similarities of the problems faced in the Ethiopian schools.

Accordingly, AREB has also confirmed that the pedagogical emphasis of CRCs to be modern methods of teaching related to student centered active learning methods, curriculum implementation in response to the local condition, modern classroom management, continuous assessment, action research and the likes. In addition, the report of AED/BESO (2005:6-7) presented us with lists of training contents covered in CRCs in the year 1996 and 1997 EC in Amhara Region. In this report within two -Woredas Basona Worana and Debre Berhan of North Shewa- 21 and 14 training topics were covered in 1996 and 1997EC respectively. To realize these trainings AED/BESO spent 44,400.00 and 55,000.00 in the respective year cited above. The training topics reported as they are covered, provide us with the implemented curriculum in CRCs program.

As to how the training is implemented various options are given- as through rotating at each school or at basing the cluster center. (MOE, TESO-Inservice, 2003). However, regarding AREB the focus is on cluster center to be responsible. (AREB: 1997 ET.C).In all cases self reflection about individual self experience is motivated to realize experience sharing and better future self performance.

From the literature review appeared in this paper important issues can be highlighted. These points can be represented as follows.

First, school clustering is a means of disseminating new methods & skills of teaching that respond to the practical demand of classrooms. In this way, sharing experiences among teachers through a culture of reflection has got an important attention.

Second, activities of school clustering are highly related with capacity building of the human resources of schools. Thus, it is highly connected with the various continues teacher professional development programmes. Subsequently, school clustering is considered as a fruit of paradigm shift that concentrate from a highly centralized formal in-service teacher professional development to such decentralized, locally oriented form of teacher professional development. For this to happen, various models are suggested by scholars. Besides the activities may be directed according to the selected perspectives of teachers professional development.

Third, school clustering is considered as key strategy of enhancing teachers competence through which better learning performance of teachers can be realized.

Fourth, MOE of Ethiopia and other stakeholders believed to improve quality of the education through increasing capability of teachers so that they can perform well in the classroom. They also believed that teachers professional competence can be enhanced through engaging teachers in continuous professional development like in cluster resource centers of schools. This strategy is taken as promising, it seems, based on the experience of other countries and suggestions of many scholars. Due to this, by now, the establishment and activities of school clustering has got conceptual, legal & moral basis in Ethiopia & Amhara region.

CHAPTER THREE

3. RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

Chapter three deals with the research design and methodology employed in this study. It contained nine headings and six other sub-headings. The headings briefed us with the research design, characteristics of sample groups, study area, subjects and sampling technique, research instruments, pilot testing report, data collection strategies, and methods of data analysis. The details are presented below.

3.2 Research Design

This research can be considered as causal- comparative research, sometimes called as ex post facto research. It is understood from Gall, Borg and Gall (1996) and Sharma (2000:205) that this method of research used to explain the dependent variables in the absence of controlling the independent variables. Similarly, it was preferred to explain the contribution of school cluster activities in enhancing teachers professional competence in the context that the student researcher had no control of the independent variables.

In this study getting or not having school cluster experiences by teachers is considered as an independent variable. Besides, teacher's professional competence - as seen in terms of performance and opinion of teachers - was considered as dependent variables. Furthermore, as Sharma (2000) indicated, this research design was selected to take the advantage that it permits to deal with descriptive nature of the findings and examine the presumed cause and effect correlation aspects. To satisfy all these needs of the research, various types of data collecting instruments had to be employed. This could be warranted by using causal-comparative study as it was indicated by Gall, Borg, and Gall (1996).

The research was also comparative in that it strove to see the contribution of the independent variables on the dependent variables. The comparisons were made on two levels. These were: first between the performances of teachers who got training in CRC and who didn't get such

training. Secondly between performances of NGO supported CRC teachers with those who didn't get any NGO support.

3.3 The Nature and Characteristics of Sample groups

The sample groups taken from this study were:

a) BESO supported CRC teachers group

b) ADA supported CRC teachers group

c) CRC teachers group that didn't receive any NGO support

d) Non- CRC supported teachers group.

A) BESO supported teachers group consisted of teachers who have been exercising BESO's support through Gudobert CRC. BESO rendered its service technically in collaboration with Debre Birhan Teachers Training College (DBTTC). It also provided them with material support mainly stationary materials. Trainings have been rendered to teachers by DBTTC based instructors and two permanently assigned CRC supporters (The two supporters are hired by DBTTC). Besides, teachers from the CRC member schools had also been encouraged and in turn they provided trainings to their colleagues. In addition, the activities of the CRC were regularly supervised by government assigned supervisor and DBTTC assigned supporters. In addition to this BESO's support, Gudobert CRC had also received government support and supervision as any of the CRC found elsewhere.

B) ADA supported CRC group of teachers were teachers of Enewary CRC in Moretna Jirru Woreda. ADA supported this CRC technically through trainings. The trainings were given mainly through workshops for selected teachers of Enewary CRC. The trainings were based on the expectation that the trainings could be duplicated back in the CRC by those trained teachers. Besides, ADA had also supported Enewary CRC with materials (Computer, printer, photocopy machine and stationary materials). In parallel to ADA's support, like that of Gudoberet CRC, Enewary CRC had also received supervision support from the Regional Education Bureau.

C) CRC teachers group that didn't receive any NGO support. This group of teachers didn't get any NGO support so far. The CRC has been managed fully by Ankober Woreda Education

Office. It had been supported and supervised by government assigned supervisors only. Such type of CRCs are many in numbers. However, Balambaras Yilma Woldeyes primary school CRC of Ankober was taken as a sample.

D) Teachers group that didn't receive any CRC support. CRCs have been organized according to rules issued by AREB. Based on this rule CRC can be organized among 3-4 nearby schools so that teachers can meet easily for training and experience sharing purpose. However, few schools in the zone are located in isolation very far from other schools. Due to this reason teachers of these schools have been depended on their pre-service trainings they got in their respective teachers training institutes.

3.4 The Sample Area

The study was done in four woredas of North Shewa in Amhara Region: Basona Worana, Moretna Jirru, Ankober and Minjar-Shenkora. These four woredas were selected based on support types given to teachers in improving their professional competence through trainings provided in CRCs. Hence, Basona Worana, and Moretna Jirru were selected to examine the contribution of supports rendered by BESO and ADA in their respective woredas. Similarly, Ankober Woreda was selected because the CRCs of the woreda haven't received any NGO support so far. Whereas, the selected schools in Minjar-Shenkora Woreda didn't get any CRC support because of their isolated location from other schools.

3.5 Subjects and Sampling Technique

It is remembered that the study had focused on examining teachers professional competence in response to CRCs activities. This competence had been tried to be observed through performance and opinion of teachers. Thus, the subject of this study were primary school teachers, head teachers of each school, supervisors of each CRC, DRTTC assigned CRCs' attendants, and concerned NGOs' representatives. To reach each of these, the following sampling types and unit were utilized.

Sampling Type

The sampling type was purposive sampling. It was purposive sampling because ADA has only one CRC target area i.e Enewary in North Shewa. Though, BESO has three target CRCsin the

zone, and many CRCs with no NGO support in the zone, one CRC was taken from each to keep the balance with that of ADA's. Besides, to avoid the unique positive effect of living in the zonal town on motivation and performance of teachers, the sampling procedure intentionally avoided CRCs found is Debre Birhan (Zonal town of North Shewa). Thus, Gudoberet and Enewary Primary schools CRCs were selected to examine BESO's and ADA's intervention respectively. Balambaras Yilma Woldeyes primary school CRC from Ankober woreda was also selected to represent activities of CRC with sole government support. Finally, the two schools (Awragodana and Sekawachao first cycle primary schools) of Minjar Shenkora were selected purposively because they are the only non-clustered schools in the zone.

Sampling Unit

Since the study involves four groups of teachers, it requires using samples from each group. To this end, the sampling unit of this research has five layers. The first layer made variation between cluster supported teachers and those non-cluster supported. This facilitated to deal with the basic questions of ii. The second layer splited cluster supported teachers group into three CRC support types (BESO, ADA, and only government). Through these divisions of CRCs basic questions iii & iv were tried to be addressed. The third unit was on considering schools from each CRC. Thus, two schools were selected from each CRC based on accessibility factors. The fourth layer was targeted to reach teachers of both cycles of primary school. The last layer was teachers of each cycle. The teachers of non-clustered schools were from first cycle because of absence of second cycle in their primary schools.

Besides, the information were sought from head teachers, supervisors, DBTTC assigned CRCs' attendant, and concerned NGO's representatives to answer some of the basic questions one and to explain the general conditions of CRCs in relation to enhancing professional competence of teachers.

In relation to sample size, 50 percent of the schools (i.e. six schools) of each CRC and 100 percent of non-CRC schools (i.e. two) were taken into consideration. Regarding sample teachers, above 39 percent of each school and a total of 52 teachers which is 40.3 percent were included. Details are depicted on Annex 1. These teachers were made to answer the questionnaire and were checked against performance observation rating scale.

Table 3.1 Size of Observed/ Respondent Teachers by Woreda, Schools Cluster and Schools

Woreda	Name of school cluster	School	No of school teachers			No of observed/respondent teachers									
			Grades 1-4	Grades 5-8	Total	Grades 1-4		Grades 5-8		Total					
						T		T		M		F		T	
			T	T	T	No	%	No	%	No	%	No	%	No	%
Basona Woreda	Gudoberet (BESO supported)	Gudoberet	13	7	20	4	31	3	43	2	29	5	38	7	35
		Mush	5	6	11	2	40	3	50	1	33	4	50	5	45
		Total	18	13	31	6	33	6	46	3	30	9	43	12	39
Moretna Jirru	Enewary (ADA supported)	Enewary	29	24	53	9	31	8	33	9	31	8	33	17	32
		Segenet	4	-	4	3	75	-	-	1	50	2	100	3	75
		Total	33	24	57	12	36	8-	--	10	32	10	38	20	35
Ankober	Balambaras Yilma Woldeyes (Non-NGO supported)	Balambaras Yilma	16	8	24	6	37.5	1	50	6	45	4	44.4	10	41.7
		Kundi	4	-	4	2	50	-	-	1	50	1	50	2	50
		Total	20	8	28	8	40	1	50	7	41	5	45	12	43
Minjar	Non CRC participated	Awrago dalla	2	-	2	2	100	-	-	2	100	-	-	2	100
		Sekawacho	11	-	11	6	54.5	-	-	6	54.5	-	-	6	54.5
		Total	13	-	13	8	61..5	-	-	8	61.5	-	-	8	61.5
Four woredas	Total	Eight schools	84	45	129	34	40.5	18	45	28	39.4	24	41	52	40.3

3.6 Research Instruments

Three different instruments were used to collect data for this research. These were questionnaire of likert-type and ranking type for teachers, open-ended questionnaire for CRC supervisors and head teachers of sample schools; document observation and performance observation rating scale targeted to collect data about teachers activity; and interview guidelines for CRCs coordinators from woreda, DBTTC and concerned NGOs. Besides, to identify delivered trainings given to each CRS, delivered training inventory form was also used at each CRC level.

Questionnaire

As the questionnaire of this study was presented to two groups of respondents, the characteristics of the items of questionnaire had been two types. The open ended questions contain eleven main items. The purpose of this open ended question was that to get evaluative feedback about school cluster activities from middle level actors. The closed type of questionnaire was designed to get information from observed sample teachers. The purpose of this questionnaire was to collect data about the opinion and experience of teachers in various teaching learning related issues so as to

supplement the data collected using observation rating scale and then increase the reliability of information collected.

The questionnaire presented to the teachers has two parts that concentrate on the basic personal information of the respondent and her/his opinion and experience on the implementation of selected teaching methods and related activities.

Nature and Distribution of main items in the Questionnaires

The nature and distribution of the main items in the questionnaires were deliberately oriented towards classroom and school cluster pedagogical activities so as to address the basic questions of this research. Thus, the items in open ended questions presented to middle level actors were about types and practical importance of rendered training in their respective school cluster, about the manner of provision of trainings and decision making trends in CRCS, and about observed problems and suggested solutions in implementing the trainings in the school. These issues had been presented using seven questions.

The items of the first pack directed to teaching activities (see Appendix iv). The items related to classroom activities were carefully adapted from the work of Ahmed (1994) and Wandberg and Rohwer (2003), while items related to CRCs and other related issues were constructed by the researcher of this study based on reviewed literature and document consultation.

The items (other than those dealing with personal information) of the questionnaire were presented using five tables (see Appendix iv). Table 1 contained 13 selected training topics rendered in school clustering. Table 2 consisted of 22 selected opinions regarding school cluster based trainings. Table 3 had two sub-sections A and B. Section A made to deal with varied level of frequencies of implementing some selected teaching methods through 9 items. Out of these, three of them were designed to represent traditional method of teaching. These were: teaching through lecture, through question and answer, and through making students copy notes from chalkboards. The other seven items were intended to reflect modern method of teaching. These were teaching through student dominant discussion, group work, role play, project work, guided discovery method, problem solving method, and inquiry learning method. Section B of this table focused on frequency level of utilizing curriculum materials during the process of preparing lesson plan. Under this section five items were found. Totally, table 3 contained fourteen items.

Respondents had been required to indicate their agreement level:

- Concerning the practical importance of each training topic indicated on table 1;
- Regarding stated opinion about school cluster based trainings presented on table 2; and
- Show the level of frequency of using the selected activities and curriculum materials stated on table 3.

Items of tables 4 and 5 were intended to be ranked by respondents. Besides, items of table 4 were almost supplementary to items of table 1, while items of table 5 were similar to items of table 3 section B. However, items of table 4 were arranged to be ranked based on difficulty level, while items of table 5 were designed to be ranked based on simplicity level as the respondent's experience during implementation. Tables 4 and 5 were needed to keep the relative internal consistency of the responses given by each respondent.

Document Observation

Two document observation tools were being used in this research. The first one was designed to collect data that enable answer for the first basic question of this study. Hence, an attempt was made to get data, for the purpose of comparing the designed and implemented curriculum regarding CRC based trainings, through school cluster training inventory form (see Appendix 1). To realize this purpose school cluster training follow up records and reports at DBTTC and sample CRC were consulted.

The second document observation rating scale was designed to see recordable performance of teachers (i.e. to see teacher's skill of lesson planning, continuous assessment implementation, and elements of portfolio recording). This tool was prepared to extract information that could be difficult to collect directly using teaching performance observation rating scale. The document observation rating scale contained three main items dealing with quality of lesson plan, quality of continuous assessment, and elements of portfolios and other follow up documents. Each of these main items was accompanied by 8, 6, and 4 indicators respectively. Totally, this document observation rating scale consisted of 18 indicators. The indicators had been constructed by the researcher of this study based on provided trainings in CRCs.

Teaching Performance Observation Schedule

This tool demands observing each selected sample teacher at classroom while she/he teaching. It was designed to assess competence of teachers through direct observation. Besides, it has seven major themes of teaching competencies. The last one (teaching readiness & ability to manage self-contained class) was added to be observed while teachers for grades 1-4 level teaching. These main teaching competences identified are:

1. Classroom organization and management
2. Subject matter knowledge and proficiency
3. Communication skill
4. Methods of teaching utilized in classroom
5. Teaching aids preparation and usage
6. Conformity of presented lesson with the planned lesson
7. Ability to mange self contained classes

The above listed indicators of teaching competencies were qualified by lists of sub-items serving as teaching performance indicators. Accordingly, the first one i.e. classroom organization and management was defined through 10 teaching performance indicators (see Appendix iii). Then the other listed competencies, except the last two, defined through 5, 7, 11 and 3 indicators respectively. In addition, it had been planned that the observed activity to be filled by the observer using five-scale measurement.

Interview Guide

Finally interview guide was also used to collect data from the concerned officials/ experts of the NGO and government offices to get information about their offices present and future interest on CRC. The elements of this guide are presented on appendix vi.

3.7 Pilot testing of the Research Instruments

The research instruments, before they were used for data collection, were subjected to pilot testing in Goshe Bado primary school of grades 1-8 located in Bason Worana Woreda. The purpose of this piloting was to get research instruments that enable to collect reasonably valid and reliable data.

Hence, performance observation checklist had been pre-tested, before it got its present shape and being administered. The classroom observation and rating in the pilot testing were made with the help of two raters while each teacher was teaching in the class. The rating scale ready for pilot testing had contained all activities that could be seen from document (continuous assessment form and record, students' exercise book, portfolio records) and from the ongoing classroom activities. The result indicated that three major adjustments to be made. The first was that the need to divide the items to be observed and rated into two, i.e. into document observation rating scale part and classroom teaching performance observation rating scale, because, the items/ indicators that have to be rated from observation of documents found difficult to be rated while the class is going on. Secondly, five items which had been designed to show us utilization of curriculum materials in lesson planning procedures were relocated to be covered in the questionnaire because they couldn't be rated through such classroom observation.

Finally, after consultation with the enumerators and teachers selected for this piloting, some minor modifications and adjustments were made on the initial presentations of some items and rating keys.

The questionnaire was also pre tested by distributing the questionnaire to the observed teachers for pilot testing. After collecting back the papers and had discussion with the respondents some misleading words were identified and substituted by better understandable words. Besides, modifications were made in the rearrangement of the items.

3.8 Data Collection Strategies

In view of the basic questions of the research, the following data collection strategies were employed. The first basic question demands to test the conformity of rendered trainings in CRC with that of the perceived shortcomings of teachers at the very beginning of school cluster system planning. Thus, document consultation at DBTTC and each CRC had been made at the beginning. To get answers for basic questions number 2-4 the administration of questionnaires, performance and document observation checklists had been necessary. Hence, each of these research tools were administered through contacting selected teachers from each sample school.

In order the questionnaires to be filled by respondents, the selected teachers had been contacted face to face and briefed about the confidentiality of their response together with the nature of the items in the questionnaire. Similarly, they were also briefed about the administration of

classroom observation and observation of documents found in the hands of the teachers. Then, classroom observation schedule plan was made with the teachers collectively.

In the observation process, classroom observation was made to be preceded by document observation so that better informed performance observation could be made. Besides, the observation was completed with the help of one data collector who has a BA degree and working over 10 years in high school as a teacher. Discussion was made with this data collector at the very beginning about the tools of the research. Finally, to get reliable information, one selected teacher was observed twice at different days.

3.9 Methods of Data Analysis

In analyzing the data collected appropriate technique were employed to explain the findings in line with the basic questions of the research and the nature of the data collected. To find answer for basic question number one of this research, the data collected using rendered training inventory form (Appendix i) were compared with the designed training curriculum at the start of school cluster system by equating the topics of trainings.

To answer the remaining three basic questions of the research, first the collected data had been divided in two parts as data presented in qualitative form and quantitative form. Following this, the responses given in open-ended way by supervisors of each CRC and head teachers of each schools (Appendix vi) and data collected based on interview guide (Appendix vii) were analyzed qualitatively. The data responded in rank order form based on the questionnaire appendix iv table 4 and 5 were analyzed using percentages of rank given to each item(see annexes 5A&B,and 6A&B).

The other data collected were the followings. These were:

1) data collected through the two observation rating scale of appendices ii and iii.
2) data collected through questionnaire appendix iv table 1, 2 and 3 that deal with respondents own opinion regarding their experience in CRCs and activities of classroom in which they are teaching.

All of these data had been designed and responded using five scale response options given to each item. For instance, the points were given 5 points to 'very high', 4 points to 'high', 3 points to 'medium', 2 points to 'low', and 1 point to 'very low', responses.

Therefore, to analyses the data collected in this way, first, the numerical values of the responded data had been arranged so that they would be suitable for statistical treatment and sound interpretation. Consequently, since the responded items contained a mixture of favorable and unfavorable statements, to get the direction where the same score implies the same thing, value transformation was made. Thus, the scoring was reversed for the unfavorable statements. That is, 5 points to 'very low', 4 points to 'low', 2 points to 'high', 1 point to 'very high' responses while the middle score (3) remained as it was. Such transformation of scores has been supported by Trochim (2005:211). In this manner, from the questionnaire of first pack (Appendix iv) talbe 2, the scores of items 1, 2, 6, 8, 10, and 12 were transformed. Similarly, the scores of items 1, 2, 3 of table 3A and 3B were transformed (appendix iv).

Then, to answer the basic questions of this research, the scores of each sample group were analyzed based on attained mean, standared deviation & t - values. The data had also been organized in themes of main features selected to be discussed. For example, points related to lesson plan quality, classroom organization and management, methods of teaching as sub classified into traditional and modern, continuous assessment, . . . etc. were considered as main features. Moreover, the feedbacks collected using questionnaire and observation rating scale had been treated separately. However, for the sake of plausible interpretation, the results of the themes were equated/or triangulated against each other. This was done according to their character of main features of the items.

Finally it is remembered that the basic questions of this research were directional in their nature. Thus, it became necessary to explain the directional differences between each of the CRC's training supported teachers group with those who didn't receive any CRC's training support group using one-tailed t-test. Similarly, the comparison was also made between teachers of NGO supported CRCs (Enewary and Gudoberet) on one side and teachers of non-NGO supported CRC group (Balambaras Yilma) on the other side. The same comparison was also made between BESO supported and ADA supported CRCs groups. The results were also explained at 95 percent confidence level. Such type of treatment of data was also supported by Rubin and Babbie (1997) in relation to the concept of one tailed t-test.

CHAPTER FOUR

4. PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

4.1 Introduction

Chapter four of this paper deals with the presentation, analysis and interpretation of the data collected using data collection tools stated in chapter three. It contained five parts in addition to this introduction. The parts are: first, about data concerning the issues of designed and implemented CRC training curriculum. Second, about profile of sample teachers. Third, about observed performance indicators of teachers competence. The fourth one is regarding opinions of respondents on selected main features of teachers performance and CRC related issues. The last one is about major findings and discussion. Details are presented as follows.

4.2 Planned and Implemented CRC Training Curriculum

When school cluster system had been pioneered in Amhara region, it has been thought to alleviate some of the major professional training manual problems. The problems were listed by AREB's documents April, 2003; Feb., 2004; and April, 2005). The listed topics, in these documents, could be taken as designed topics for the training curriculum through CRC. The major problems (selected topics for the purpose of this paper) related to pedagogical capabilities were listed as follows.

1. Lesson planning suitable to active learning
2. Modern methods of teaching defined as participatory student center method
3. Creation of stimulating classroom environment conducive to active teaching learning process
4. Preparing and utilizing teaching aids
5. The concepts and implementation of continuous assessment
6. Managing self contained classes
7. Classroom organization and management
8. Enriching and presenting curriculum materials in response to local conditions
9. Teaching integrated subjects
10. Action research

11. Evaluating curriculum materials and providing feedback
12. English language teaching, and the likes

Concomitant to the expected trainings on these major issues, success indicators were also identified. These success indicators reflect all the stated major topics of training being taken as a cluster of practice by CRC based trained teachers.

The implemented CRC training curriculum as taken from AED/BESO II (2005:6-7) and as collected from each sample CRC using training inventory from (Appendix i), and recorded documents of DBTTC CRC coordinating office, were listed on table 4.1.

Table 4.1 Training topics given by DBTTC to teachers in two years of 1996 and 1997 E.C based on AED/ BESO school cluster support

1996 E.C	1997 E.C
Science kit and laboratory principle	Cluster roles and responsibilities
Mathematics teaching techniques	Professional ethics
Mathematics games	Subject integration and curriculum integration
Communication and speaking	Lesson planning
Action research	Continuous assessment
Class demonstration	Teaching and learning methodologies
Curriculum integration	English language methodology
Instructional media	Making pocket board
Illustrative material preparation	How to lead a gender club
120 minutes lesson preparation	HIV/AIDS
Student centered active learning methods	TALULAR (Teaching And Learning Using Locally Available Resources)
Activity oriented lesson preparation	
How to support ladies education	
Principles of supervision and implementation	
Ethical and civics demonstration	

Source:- AED/BESO 2005:6-7

Besides, according to other recorded documents found at DBTTC cluster coordinating center and CRC report documents trainings were given to teachers of the sample CRCS. The training topics are shown on table 4.2

Table 4.2 Topics of Trainings given to teachers in the three CRCs (1998 and 1999 E.C)

Training Topics	CRC											
	Balambaras Y.W(A)				Gudbort(B)				Enewary(B)			
	Participation		Source of trainer's institute	# of session	Participation		Source of trainer's institute	# of session	Participation		Source of trainer's institute	# of session
	Y	N			Y	N			Y	N		
Lesson planning	✓		member Schools & CRC supervisors		✓		DBTTC[2]	6				
Classroom management		✓			✓		School [1]	12				
Student- center teaching	✓			1	✓		School [1]	3	✓		School [1]	1
Continuous assessment	✓			2	✓		DBTTC[2]/ School	2	✓		School [1]	1
Portfolio preparation and utilization	✓			-	✓		DBTTC[2]	6	✓		DBTTC[1]	1
Action research	✓			1	✓		School [1]	1	✓		School [1]	2
Curriculum material evaluation	✓			2	✓		DBTTC[2]	6				
English language teaching methods	✓			4	✓		DBTTC[2]	1				
How to teach maths	✓					✓			✓		DBTTC[1]	2
Phonetics approach of teaching English		✓				✓			✓		DBTTC[1]	1
Use of science kit	✓				✓		School					
Gender and HIV/AIDS					✓		DBTTC[2]	1				
Creating stimulating classroom		✓			✓		School					
Teaching aids preparation and utilization	✓				✓		School					
Managing self contained classes					✓		School					
Teaching integrated subjects		✓				✓						
Enriching curriculum materials		✓				✓						
Finding trainer of trainee		✓				✓			✓		School [1]	2

Note:- Y= Yes, N = No

- School 1 = Workshop participated teachers
- DBTTC1 = ADA support through DBTTC
- DBTTC2= AED /BESO support through DBTTC

A= Average Duration of a session is 2 hours

B= Average Duration of a session is 6 hours

Source: Report documents of each CRC

The training topics covered in the three CRCs were found as part of the planned training curriculum package of CRCs. However, as it could be seen from table 4.2, differences were observed in terms of session duration spent for trainings and on trainers' exposure to the training

topics. For example, the time devoted for trainings in CRCs of Balambaras Yilma Woldeyes, Gudoberet and Enewary were 22,228, &48 hours respectively. This can indicate that the time spent for the trainings were not the same and the lowest was found in Balabmaras Yilma Woldeyes primary schools CRC (Ankober).

4.3 The Profile of Observed/ Respondent Teachers

The profile of observed/ respondent teachers of this study was explained in terms of five indicators (see Table 3). These were sex, age, years of service in teaching, years of experience in school cluster activity and teachers level according to the professional ladder of teaching.

Table 4.3: Profile of Observed/ Reaspondant Teachers

Selected profile of teachers	Description	Number of Sample Teachers of each group			
		Balambaras Yilma woldeyes	Gudobert	Enewary	Non-CRC schools
Sex	Male/ female	M=7 F=5	M=4 F=8	M=10 F=10	M=8 F=0
Age In Years	less than 25	–	–	–	2
	26-30	1	2	–	2
	31-35	–	2	4	4
	36-40	4	3	8	–
	41-45	5	4	7	–
	greater than 45	2	1	1	–
Years of services in teaching	less than 5	1	–	–	2
	6-10	–	2	1	5
	11-15	1	1	5	1
	16-20	3	4	6	–
	21-25	6	5	7	–
	greater than 26	1	–	1	–
Years of experience in CRC	None	–	–	–	–
	1	–	–	–	–
	2	4	3	3	–
	Above or equal to 3	8	9	17	–
Teacher's level based on the professional ladder of teaching	Beginner teacher	1	1	1	3
	Junior teacher	–	–	–	3
	Teacher	2	2	2	2
	Senior teacher	5	4	5	–
	Associate lead teacher	4	5	9	–
	Lead teacher	–	–	3	–

Note:- All Grades 1-4 teachers are graduates of TTI

All grades 5-8 teachers are Diploma holders

As a result, in terms of sex, the total participants in this research were almost balanced i.e. 51.9 percent male & 48.1 percent female. 78.8 percent of CRC participating teachers had greater than 10 years and 75 percent of non-CRC participating teachers were between 6-10 years of service in teaching. Besides, 93.18 percent of the teachers from CRC groups were found at teachers or above level in professional ladder of teaching. This made the sample reasonable to get the desired data from respondents of nearly similar background.

Moreover, 77 percent of the observed/ respondent teachers have greater than or equal to three years exposure in CRC's activities. Thus, to assess the contribution of school cluster activities on teachers' competence, the sample subjects were assumed to be reasonable.

Generally, the profile of teachers, in CRC participating groups found almost homogeneous in many of the aspects. This created conducive environment to answer basic questions connected with this issue because their homogenous profile contributed to minimize extraneous factors that intervene in performance of sample teachers.

4.4 Observed Teachers Performances as Indicator of Teachers Competence

As it is made clear in 3.6 of this paper, eleven main features and a total of 51 items were arranged to be rated during teachers handled document and its subsequent classroom observation. Each of the eleven main features were analyzed separately by sample group and level of cycle. Each of the main features mean scores differences also analyzed and compared against selected control group's result. Details are presented as follows.

Lesson plan was one of the eleven main features observed. This main feature was represented by eight qualifiers (see Appendix ii). The mean scores and level of mean difference were presented on table 4.4.

Lesson Plan

Table 4.4 t-test for Comparing Sample Groups on Lesson Plan Quality

Compared Sample Groups	School cycle	Descriptive Statistics			t-value
		Number of Sample Teachers	Mean	Standard deviation	
CRC	1-4	26	25.4	3.08	5.424
NCRC		8	19.3	1.14	
NGO-supported CRCs (Gudoberet &Enewary)	1-4	18	17.28	2.80	-2.928
Non-NGO supported CRC (B.Y.W.-Ankober)		8	21.2	3.87	
NGO-supported CRCs (Gudoberet &Enewary)	5-8	14	21.53	3.64	2.124
Non-NGO supported CRC (B.Y.W.-Ankober)		4	17.5	1.53	
BESO -supported CRC (Gudoberet)	1-4	6	34	3.16	4.585
ADA supported CRC (Enewary)		12	23.9	2.75	
BESO-supported CRC (Gudoberet)	5-8	6	23.7	4.46	1.856
ADA supported CRC (Enewary)		8	19.9	3.23	

In comparing CRC participating teachers group (CRCs of Balambaras Yilma Woldeyes, Gudoberet and Enewary) with those non-CRC supported teachers group of Minjar Shenkora, CRC participating teachers' lesson plan quality was found better than those non-CRC participating teachers group. The level of mean difference between CRC supported versus non-CRC supported teachers group was found 5.424. This t-value made the mean difference significant in favor of CRC supported groups of teachers. The same comparison was also made between NGO supported CRC with non-NGO supported Balambaras Yilma Woldeyes CRC on one side and between BESO supported with ADA supported CRCs. The result, as it is seen from table 4.4, in both 1-4 and 5-8 cycles favor NGO supported and BESO supported CRCs.

Regarding their standard deviation, non-CRC participating teachers and non-NGO supported 5-8 cycles teacher groups have lower (1.14 and 1.53 respectively) values of standard deviation than

their counter part. This shows that, though their attained mean values are lower, their lesson plan quality didn't show large variation among themselves.

Implementation of Continuous Assessment

This main feature of continuous assessment in the implementation was represented by six qualifiers (see Appendix ii) Table 4.5 shows us detailed information.

Table 4.5 Comparing mean differences on the Implementation of Continuous Assessment between sample groups

Compared Sample Groups	School cycle	Descriptive Statistics			t-value
		Number of Sample Teachers	Mean	Standard deviation	
CRC	1-4	26	22.1	1.41	9.357
NCRC		8	16.38	1.83	
NGO-supported CRCs (Gudoberet &Enewary)	1-4	18	19.11	1.09	2.794
Non-NGO supported CRC (B.Y.W.-Ankober)		8	16.4	3.87	
NGO-supported CRCs (Gudoberet &Enewary)	5-8	14	24.31	3.01	7.171
Non-NGO supported CRC (B.Y.W.-Ankober)		4	11.5	3.70	
BESO -supported CRC (Gudoberet)	1-4	6	24.3	3.16	-0.321*
ADA supported CRC (Enewary)		12	24.8	1.23	
BESO-supported CRC (Gudoberet)	5-8	6	20.6	4.57	-3.832
ADA supported CRC (Enewary)		8	27.1	1.41	

* Not significant
P <0.05.

The first one was that higher mean values were recorded for all CRC and NGO supported CRC participating teachers groups than their counter part. In implementing continuous assessment, teachers group of ADA supported CRC was found a little bit better than those BESO supported CRC.

In comparing mean value differences, the t-value 9.357 indicated the existence of significant difference favoring CRC participating teachers group than non-CRC one. Similarly, the t-values

of 2.794 and 7.171 proved the presence of significant differences between NGO supported and non-NGO supported CRC 1.4 and 5-8 cycles teachers group respectively favoring NGO supported teachers group. In comparing the mean differences of BESO and ADA supported teacher groups, the difference for 1-4 cycle was not found significant statistically by t-value of –0.321. Whereas, the comparison made for 5-8 cycle teachers of the same comparing groups the t-value –3.832 indicated that the mean difference was statistically significant in favor of ADA supported CRC teachers group.

Classroom Organization and Management

Classroom organization and management was specified using ten indicators (see Appendix iii) and the aggregate mean score and level of mean differences of all sample groups is presented on table 4.6.

Table 4.6 t- test for Comparing Sample Groups on Classroom Organization and Management

Compared Sample Groups	School cycle	Descriptive Statistics			t-value
		Number of Sample Teachers	Mean	Standard deviation	
CRC	1-4	26	32.6	4.56	8.019
NCRC		8	19.5	0.60	
NGO-supported CRCs (Gudoberet &Enewary)	1-4	18	34.61	2.98	3.339
Non-NGO supported CRC (B.Y.W.-Ankober)		8	28	7.27	
NGO-supported CRCs (Gudoberet &Enewary)	5-8	14	31.66	2.33	7.331
Non-NGO supported CRC (B.Y.W.-Ankober)		4	20.8	3.59	
BESO -supported CRC (Gudoberet)	1-4	6	44	3.58	6.011
ADA supported CRC (Enewary)		12	29.9	2.81	
BESO-supported CRC (Gudoberet)	5-8	6	33.2	1.94	2.233
ADA supported CRC (Enewary)		8	30.5	2.43	

The recorded and calculated values provided us with attained mean values of highest to lowest from BESO supported Gudobertet CRC, NGO supported CRCs (Gudoberet and Enewary) ADA supported Enewary CRC and non-NGO supported Balambaras Yilma Woldeyes CRC to Minjar Shenkora non-CRC teachers groups respectively. Moreover, the attained mean scores of

Gudoberet CRC teachers group for both 1-4 and 5-8 cycles were 44 and 33.2 respectively. These were greater than the mean scores of 29.9 and 30.5 of ADA supported Enewary CRC 1-4 and 5-8 cycles teachers group respectively.

Regarding the level of attained mean differences, the t-value (8.019) calculated for teachers of CRC supported and teachers of non-CRC supported groups revealed statistically significant difference favoring CRC group. Similar differences (3.339 for 1-4 cycle and 7.331 for 5-8 cycle) were found between teachers of NGO supported CRC and teachers of CRC with non-NGO supported favoring NGO supported CRC. Furthermore, the level of these mean differences, as proved by their respective t-value, became very high favoring BESO supported Gudoberet CRC teachers group.

Subject Matter Knowledge and Proficiency

Fifteen items were specified c(see Appendix iii) to quality subject matter knowledge and proficiency. The analysis of this part is presented using table 4.7.

Table 4.7 Comparing Mean Differences on Subject Matter Knowledge and Proficiency between Sample Groups

Compared Sample Groups	School cycle	Descriptive Statistics			t-value
		Number of Sample Teachers	Mean	Standard deviation	
CRC	1-4	26	17.7	2.63	1.040*
NCRC		8	16.6	2.56	
NGO-supported CRCs (Gudoberet &Enewary)	1-4	18	18.72	2.40	2.824
Non-NGO supported CRC (B.Y.W.-Ankober)		8	15.5	3.27	
NGO-supported CRCs (Gudoberet &Enewary)	5-8	14	16.14	3.52	-0.056*
Non-NGO supported CRC (B.Y.W.-Ankober)		4	16.25	3.10	
BESO -supported CRC (Gudoberet)	1-4	6	19.5	2.59	0.635*
ADA supported CRC (Enewary)		12	18.3	2.42	
BESO-supported CRC (Gudoberet)	5-8	6	15.83	3.06	-0.242*
ADA supported CRC (Enewary)		8	16.4	2.67	

* Not significant
P <0.05.

The attained mean value (19.5) of BESO supported Gudobert CRC 1-4 cycle teachers was found to be the leading while the attained mean score (15.5) of non NGO supported Balambaras Yilma Wodleyes CRC of the same cycle was the last.

Thirdly, the level of mean difference between teachers of Balambaras Yilma Woldeyes (non-NGO supported) CRC and teachers of non-CRC participating from Minjar Shenkora Woreda, and between teachers of CRC supported group and teachers of non-CRC participating group was found not statistically significant according to t- value of 1.040.

Fourthly, the t-value (2.824) calculated separately for NGO supported Gudoberet, and Enewary CRCs against non-NGO supported Balambaras Yilma Woldeyes CRC statistically represented statistically significant differences in favor of NGO supported CRC 1-4 cycle teachers groups; while the same comparison for 5-8 cycle gave us mean differences (-0.056) of not significant statistically. Similarly, no statistical differences observed between BESO supported and ADA supported CRCs of 1-4 and 5-8 cycles teachers group regarding subject matter knowledge and proficiency.

Communication Skills

Communication skill was tried to be specified in the observation rating scale (Appendix iii) through seven items. In analyzing the mean scores and level of mean differences of the sample groups the following results were found (Table 4.8).

Regarding teachers' performances on their communication skill five important points can be identified (see table 4.8). First, attained mean scores of all CRC teachers' group separately and together were greater than the mean score of non-CRC supported teachers group. Second, the pattern of the sample groups in size of attained mean value from higher to lower was BESO supported Gudoberet, ADA supported Enewary, non-NGO supported Balambaras Yilma Woldeyes CRCs, and non-CRC teachers group of Minjar Shenkora. third, the attained mean value of 1-4 cycle teachers group was greater than that of 5-8 cycle teachers of each CRC group except that of Enewary.

Table 4.8 Comparing Mean Differences on Communication Skills between Sample Groups

Compared Sample Groups	School cycle	Descriptive Statistics			t-value
		Number of Sample Teachers	Mean	Standard deviation	
CRC	1-4	26	27.7	3.86	5.529
NCRC		8	19.9	1.56	
NGO-supported CRCs (Gudoberet &Enewary)	1-4	18	28.67	4.28	1.837
Non-NGO supported CRC (B.Y.W.-Ankober)		8	25.6	2.92	
NGO-supported CRCs (Gudoberet &Enewary)	5-8	14	28.46	2.25	5.308
Non-NGO supported CRC (B.Y.W.-Ankober)		4	21.8	1.26	
BESO -supported CRC (Gudoberet)	1-4	6	31.2	2.51	1.127*
ADA supported CRC (Enewary)		12	27.4	5.05	
BESO-supported CRC (Gudoberet)	5-8	6	29.2	3.06	1.029*
ADA supported CRC (Enewary)		8	27.9	1.64	

* Not significant
P<0.05

Fourth, the level of attained mean difference (5.529) of CRC supported teachers group and teachers of non-CRC was significant in favor of CRC participating teachers group Fifth, the attained mean differences (1.837 and 5.308 for 1-4 and 5-8 cycles respectively) of NGO supported CRC participating teachers group (Gudoberet and Enewary) against teachers of non-NGO supported CRC group (Balambaras Yilma Woldeyes) was statistically significant in favor of BESO supported Gudoberet CRC and ADA supported Enewary CRC groups of teachers. On the other hand no statistically significant difference was found between BESO supported and ABA supported CRC groups on teachers' communication skills.

Utilization of Traditional Methods of Teaching

The frequent use of this main feature as method of teaching by itself was considered as unfavorable in the context of the desired competence of teachers. However, to observe its occurrences in the classroom, three qualifiers utilization of lecture, asking convergent questions,

and covering much time on giving notes were set in defining traditional method of teaching (see Appendix iii) and the analysis is presented through table 4.9.

4.9 t-test for comparing sample Groups on Utilization of Traditional Method of Teaching

Compared Sample Groups	School Cycle	Descriptive Statistics			t-value
		Number of Sample Teachers	Mean	Standard Deviation	
CRC	1-4	26	8.8	1.63	-6.621
NCRC		8	12.7	0.46	
NGO-supported CRCs (Gudoberet &Enewary)	1-4	18	8.19	1.21	-2.699
Non-NGO supported CRC (B.Y.W.-Ankober)		8	10.1	2.44	
NGO-supported CRCs (Gudoberet &Enewary)	5-8	14	8.9	2.30	-0.069*
Non-NGO supported CRC (B.Y.W.-Ankober)		4	9	3.42	
BESO -supported CRC (Gudoberet)	1-4	6	7	0.89	-1.900
ADA supported CRC (Enewary)		12	8.8	1.37	
BESO-supported CRC (Gudoberet)	5-8	6	7.7	2.42	-1.622*
ADA supported CRC (Enewary)		8	9.8	2.38	

* Not significant
P <0.05.

From table 4.9 we can identify the following points. From 1-4 cycle non-CRC participating teachers of Minjar Shenkora, non-NGO supported Balambaras Yilma Woldeyes, ADA supported Enewary CRC and BESO supported Gudoberet CRCs mean scores were found to be 12.7, 10.1, 8.8 and 7 respectively.

In comparing mean difference in utilization of traditional method of teaching of 5-8 cycle between NGO supported and non-NGO supported CRCs teachers groups the t-value was found as –0.069 which indicated no significant statistical difference. Similarly, the t- value -1.622 indicated the existence of no statistically significant difference between BESO supported Gudoberet CRC and ADA supported Enewary CRC 5-8 cycle teacher groups. For the others comparison between CRC and non-CRC, NGO and non-NGO, and BESO and ADA supported

CRCs teachers groups, the t-values indicated the existence of significant statistical differences favoring non-CRC, non-NGO, and ADA supported teachers groups in utilization of traditional method of teaching.

Application of Participatory Methods of Teaching

This main feature was observed in terms of eight qualifiers (guided discovery method, divergent questions, enquiry learning, group work, brainstorming, role play and the use of varied instructional processes) listed in appendix iii. The attained mean position has been presented in the following table.

4.10 Comparing Mean Differences on Application of Participatory Methods of Teaching Between Sample Groups

Compared Sample Groups	School Cycle	Descriptive Statistics			t-value
		Number of Sample Teachers	Mean	Standard Deviation	
CRC	1-4	26	21.3	4.38	4.047
NCRC		8	10.2	0.92	
NGO-supported CRCs (Gudoberet &Enewary)	1-4	18	24.56	4.74	5.502
Non-NGO supported CRC (B.Y.W.-Ankober)		8	14.1	3.75	
NGO-supported CRCs (Gudoberet &Enewary)	5-8	14	20.84	3.23	3.200
Non-NGO supported CRC (B.Y.W.-Ankober)		4	15.5	1.0	
BESO -supported CRC (Gudoberet)	1-4	6	30.3	4.08	2.305
ADA supported CRC (Enewary)		12	21.7	5.21	
BESO-supported CRC (Gudoberet)	5-8	6	22.5	2.59	1.600*
ADA supported CRC (Enewary)		8	19.6	3.81	

*Not significant

P< 0.05

The t- test value between CRC supported teachers group and non- CRC participating teachers group of Minjar Shenkora made clear at t-value of 14.422 that the level of mean difference was significant in favor of CRC participation. Besides, the level of mean differences between NGO supported CRC teachers groups Gudoberet and Enewary CRCs and the non- NGO supported

Balambaras Yilma Woldeyes CRC teachers group was also found statistically significant favoring NGO supported teachers in both 1-4 and 5-8 cycles. In comparing BESO and ADA supported CRC teachers group on application of participatory methods of teaching in 1-4 cycle, the t-value of 2.305 exhibited the presence of statistically significant difference in favor of BESO supported teachers groups. The same comparison for 5-8 cycle teachers group found statistically not significant at 1.600 t- value.

Preparation and Application of Teaching Aids

This main feature was also assessed using three items (Appendix iii)

4.11 Comparing Mean Differences on Preparation and Application of Teaching Aids Between Sample Groups

Compared Sample Groups	School Cycle	Descriptive Statistics			t-value
		Number of Sample Teachers	Mean	Standard Deviation	
CRC	1-4	26	8.4	2.22	0.492*
NCRC		8	8	0.93	
NGO-supported CRCs (Gudoberet &Enewary)	1-4	18	9.17	2.42	2.463
Non-NGO supported CRC (B.Y.W.-Ankober)		8	6.8	1.83	
NGO-supported CRCs (Gudoberet &Enewary)	5-8	14	5.24	1.82	-3.194
Non-NGO supported CRC (B.Y.W.-Ankober)		4	9	2.94	
BESO -supported CRC (Gudoberet)	1-4	6	12.3	3.47	2.468
ADA supported CRC (Enewary)		12	7.6	1.89	
BESO-supported CRC (Gudoberet)	5-8	6	6.5	2.74	2.150
ADA supported CRC (Enewary)		8	4.3	0.89	

* Not significant
P< 0.05

Regarding preparation and application of teaching aids the following points can be considered form table 4.11. CRC and non-CRC supported teachers groups nearly exhibited similar mean values (8.4 and 8 respectively). Consequently the t-value of 0.492 indicated that there is no statistically significant difference between the above two groups mean values. Besides, according

to the values of each group's standard deviation, 2.22 for CRC and 0.93 for non- CRC, the performance of non-CRC teachers group was more similar approaching to the group mean value than the performance of CRC participating teachers.

In comparing NGO supported Gudoberet and Enewary CRCs against non-NGO supported Balambaras Yilma Woldeyes CRC on this issue, we may extract the following points. In 1-4 cycle the mean 9.17 of NGO supported CRC teachers group was found higher than the mean value 6.8 of non-NGO supported teachers group. Following this, the t-value 2.463 indicated the existence of significant statistical difference indicating NGO supported CRC teachers group performed better than non-NGO supported teachers group. The same group comparison for 5-8 cycle teachers revealed that non-NGO supported teachers group performed better than NGO supported teachers group according to –3.194 t- value.

In comparing BESO supported CRC teachers group with those ADA supported, the size of mean of the former 6.5 was found higher than the latter one of 4.3. The standard deviation 0.89 of ADA supported teachers group indicated the existence of more similar performance of teachers than BESO supported teachers group. Whereas, the t-values 2.468 and 2.150 for 1-4 and 5-8 cycles respectively stood in favor of BESO supported teachers group on preparation and application of teaching aids.

Coherence of Planned and Presented Lesson

In examining coherence of planned & presented lesson the highest and lowest mean scores were attained by BESO supported Gudoberet CRC and non-NGO supported Balambaras Yilma Woldeyes CRC 1-4 cycle teacher groups respectively. In considering values of standard deviation only non-CRC supported teachers group and BESO supported Gudoberet 5-8 cycle teachers group exhibited above one standard deviation value. All the others have below one standard deviation value. This indicated that the performance of observed teachers was more or less similar around each group's mean value.

The level of attained mean difference between CRC participating Gudoberet, Enewary and Balambaras Yilma Woldeyes teachers group against non-CRC supported Minjar Shenkora group was 1.480 which indicated absence of statistically significant difference. The same comparison made between NGO supported Gudoberet and Enwary CRC 5-8 cycle versus non-NGO

supported Balambaras Yilma Woldeyes CRC 5-8 cycle teachers groups were not significant as t-value of 0.332 indicated.

4.12 t-test for Comparing Sample Groups on Coherence of Planned and Presented Lesson

Compared Sample Groups	School Cycle	Descriptive Statistics			t-value
		Number of Sample Teachers	Mean	Standard Deviation	
CRC	1-4	26	3.5	0.70	1.480*
NCRC		8	3	1.20	
NGO-supported CRCs (Gudoberet &Enewary)	1-4	18	3.94	0.71	4.423
Non-NGO supported CRC (B.Y.W.-Ankober)		8	2.6	0.72	
NGO-supported CRCs (Gudoberet &Enewary)	5-8	14	3.47	0.89	0.332*
Non-NGO supported CRC (B.Y.W.-Ankober)		4	3.3	0.96	
BESO -supported CRC (Gudoberet)	1-4	6	4.7	0.82	2.373
ADA supported CRC (Enewary)		12	3.6	0.48	
BESO-supported CRC (Gudoberet)	5-8	6	3.3	1.03	-1.164*
ADA supported CRC (Enewary)		8	3.6	0.87	

* Not significant

P< 0.05

Similarly, the level of mean difference between BESO supported Gudoberet and ADA supported Enewary 5-8 cycle teacher groups was not found significant statistically by t-value of -1.164. Whereas, the comparison made for 1-4 cycle teacher groups of NGO supported versus non-NGO supported CRCs on one side and BESO supported against ADA supported CRCs on the other side reflected the existence of statistically significant differences favoring NGO supported and BESO supported CRCs teacher groups respectively.

Managing Self Contained Class

Managing self contained class as a main feature was designed for 1-4 cycle teachers.

4.13 Comparing Mean Differences on Managing Self Contained Class Between Sample Groups

Compared Sample Groups	School Cycle	Descriptive Statistics			t-value
		Number of Sample Teachers	Mean	Standard Deviation	
CRC	1-4	26	3.7	0.58	8.424
NCRC		8	1.8	0.47	
NGO-supported CRCs (Gudoberet &Enewary	1-4	18	4.17	0.51	6.617
Non-NGO supported CRC (B.Y.W.-Ankober)		8	2.5	0.76	
BESO -supported CRC (Gudoberet)	1-4	6	4.6	0.41	1.966
ADA supported CRC (Enewary)		12	3.8	0.58	

The highest calculated mean scores of 4.6 and 4.17 were for BESO supported Gudoberet CRC and NGO supported CRC teacher groups respectively. The lowest mean score 1.8 was calculated for non-CRC participating, teachers group. The values of standard deviation of each group were found below one indicating the similarities of teachers performance around each respective group's mean value concerning managing self contained class.

The level of mean difference of CRC teachers group versus non-CRC participating teachers group found statistically significant favoring CRC participating teachers as 8.424 t- value indicated. In another comparison made among CRC participating teachers the following level of mean differences were found. The t-value 6.617 between NGO supported Gudoberet and Enewary CRCs teachers group and non-NGO supported Balambaras Yilma Woldeyes CRC teachers group revealed the presence of statistically significant difference in favor of NGO supported CRC teachers group. Similarly, the t-value 1.966 between BESO supported Gudoberet CRC and ADA supported Eneway CRC teacher groups indicated the existence of statistically significant mean difference which showed us better performance of BESO supported Gudoberet CRC teachers groups.

Portfolios and Self follow-up Document Keeping

Portfolios and self follow-up document keeping was the last main feature assessed from teachers' own records of her/his teaching activities. It was described in terms of four sub-indicators. (See Appendix ii).The details on mean scores and level of mean differences are presented on table 4.14.

4.14 t-test for Comparing Sample Groups on portfolios and self follow-up document keeping

Compared Sample Groups	School Cycle	Descriptive Statistics			t-value
		Number of Sample Teachers	Mean	Standard Deviation	
CRC	1-4	26	6.4	1.35	4.767
NCRC		8	4	0.76	
NGO-supported CRCs (Gudoberet &Enewary)	1-4	18	7.61	1.46	5.118
Non-NGO supported CRC (B.Y.W.-Ankober)		8	4.6	1.16	
NGO-supported CRCs (Gudoberet &Enewary)	5-8	14	6.33	2.43	1.844
Non-NGO supported CRC (B.Y.W.-Ankober)		4	4	0.95	
BESO -supported CRC (Gudoberet)	1-4	6	11.2	1.47	4.678
ADA supported CRC (Enewary)		12	5.8	1.53	
BESO-supported CRC (Gudoberet)	5-8	6	7.7	3.50	1.757*
ADA supported CRC (Enewary)		8	5.3	1.49	

*Not significant
$P < 0.05$

The attained mean scores of all sample groups were found low. However, the attained mean scores (11.2 and 7.7) rank order gave first to BESO supported CRC, and second to ADA supported CRC teachers groups respectively. Whereas, the non-NGO supported Blambaras Yilma Woldeyes CRC teachers' mean score (4.6) was slightly higher than the non-CRC participating teachers group mean score of 4.

Regarding the level of mean differences, all t-values, except between 5-8 cycle teacher groups of BESO supported Gudoberet CRC and ADA supported Enewary CRC, found on table 4.14 revealed statistically significant differences indicating the existence of better performance on

portfolios and self follow-up document keeping of CRC, NGO supported (Gudoberet and Enway) CRC, and BESO supported (Gudoberet) CRC teacher groups than non-CRC participating, non-NGO supported Balambaras Yilma Woldeyes and ADA supported Enewary CRC teacher groups.

4.5 Opinion of Respondents on Selected Main Features of Teachers Performance

To supplement the data obtained from classroom observation and reach at sound conclusion in answering the basic questions ii, iii and iv opinion of teachers was organized under five themes (see Appendix iv). The first of them was related to the utilizing curriculum and reference materials in preparing lesson plan. This main item was described and presented in terms of five items. The second main feature focused on using selected methods of teaching. The listed down methods of teaching were nine out of which the first three represented traditional method of teaching while the other six were manifestation of participatory methods of teaching. The third main feature emphasized on ranking simplicity level of implementing selected ten methods of teaching. The indicators used in this third main feature were also on using selected methods of teaching. It was presented in such a way, so that to check the internal consistency of the responses collected. The fourth main feature presented in this section was about ranking level of nine selected activities of teaching by difficulty level experienced during implementation. It was presented in this way by the same reason stated for the third main feature. The fifth main feature of this section was about respondents' opinion on the benefits of cluster resource centers experiences. This main feature was described using twenty two items.

Utilization of Curriculum and Reference Materials in Preparing Lesson Plan

Table 4.15A represents respondent answers for 1-4 cycle teachers in the four sample groups of this cycle. In the frequencies of utilizing syllabus in the process of preparing lesson plan more than 50 percent of the respondents of each sample groups of teachers confirmed that they didn't have experiences of consulting syllabus in preparing lesson plan. Only 16.7 percent of Enewary

CRC and 37.5 percent of non clustered schools teachers groups confirmed that they used to refer syllabuses at least once in a week.

In relation to the use of teachers guide, 100 percent of ADA supported Enewary CRC and non CRC respondent teachers groups confirmed for consulting teacher's guide atleast once in a week.

Almost similar pattern was followed in consulting student's textbook during lesson preparation by all respondents.

Table 4.15A ***Percentage of frequencies of the sample group teachers in utilizing curriculum and reference materials in preparing lesson plan as confirmed by respondent teachers***

No	Materials	Percent of teachers by groups and frequencies of utilization of the four sample groups of grade 1-4 teachers											
		Non-NGO CRC of Blambars Yilma			ADA supported CRC of Enewary			BESO supported CRC of Gudo Beret			Non clustered schools		
		ALW / OIW	OIM	TIS /NA	ALW / OIW	OIM	TIS /NA	ALW / OIW	OIM	TIS /NA	ALW / OIW	OIM	TIS /NA
1	Syllabus		2 (25%)	6 75%)	2 (16.7%)	3 (25%)	7 (58.3%)		1 (16.7%)	5 (83.3%)	3 (37.5%)		5 (62.5%)
2	Teacher's guide	8 (100%)			12 (100%)			6 (100%)			8 (100%)		
3	Students textbooks	8 (100%)			12 (100%)			6 (100%)			8 (100%)		
4	Reports of last lesson plan implementation	4 (50%)		4 (50%)	5 (41.7%)		7 (58.3%)	1 (16.7%)	2 (33.3%)	3 (50%)	2 (25%)		6 (75%)
5	Other references	6 (75%)		2 (25%)	3 (25%)	2 (16.7%)	7 (58.3%)	2 (33.3%)	1 (16.7%)	3 (50%)		1 (12.5%)	7 (87.5%)

Note: Alw = Always, OIW = Once in a week, OIM = once in a month, TIS = Twice in a Semester, and NA = Not at All

The other item focuses on the frequency of using reports of last lesson plan implementation in preparing the next lesson plan. Regarding this point 100 percent of Enewary CRC, 50 percent of teachers from Balambaras Yilma Woldeyes 25 percent non clustered Minjar Shenkora teachers & 16 percent of Gudoberet CRCs, participating group of teachers confirmed on repetitive (always & once in a week) use of last lesson plan implementation report. In using other references to prepare lesson plan 75 percent, 33.3 percent, 25 percent of Balambaras Yilma Woldeyes CRC, Gudoberet CRC, and Enewary CRC teachers groups respectively confirmed for referring it always & once in a week.

From respondent teachers of 5-8 cycle, no sample groups confirmed for consulting syllabuses at least once a week in the process of preparing lesson plan. Only 16.7 percent of Gudoberet CRC teachers group agreed that they used to consult syllabus once in a month. The others couldn't accustom themselves to repetitively consult syllabuses during lesson plan preparation. Contrary

accustom themselves to repetitively consult syllabuses during lesson plan preparation. Contrary to this, 100 percent of Balambaras Yilma Woldeyes CRC, and Enewary CRC teachers groups and at least greater than 87.3 percent of Gudoberet CRC teachers group confirmed for consulting teacher's guide and student's textbook at least once in a week during lesson plan preparation. Regarding the frequency of using reports of last lesson plan implementation in preparing the next lesson plan, 100 percent of Balambaras Yilma Woldeyes CRC, 50 percent of Gudoberet CRC, and Enewary CRC teachers groups didn't have much experience of consulting this report to prepare the next lesson plan. However, 66.7 percent of Gudoberet CRC, 50percent of Balambaras Yilma Woldeyes CRC, and 37.5 percent of Enwary CRC teachers group used to consult other references at least once in a week in preparing lesson plan.

Table 4.15B Percentage of frequencies of the sample group teachers in utilizing curriculum and reference materials in preparing lesson plan as confirmed by respondent teachers

No	Materials	Percent of teachers by groups and frequencies of utilization of the four sample groups of grade 5-8 teachers								
		Non-NGO CRC of Blambars Yilma			ADA supported CRC of Enewary			BESO supported CRC of Gudo Beret		
		ALW / OIW	OIM	TIS /NA	ALW / OIW	OIM	TIS /NA	ALW / OIW	OIM	TIS /NA
1	Syllabus			4 (100%)			8 (100%)		1 (16.7%)	5 (83.3%)
2	Teacher's guide	4 (100%)			8 (100%)			5 (83.3%)	1 (16.7%)	
3	Students textbooks	4 (100%)			8 (100%)			6 (100%)		
4	Reports of last lesson plan implementation			4 (100%)	1 (12.5%)	3 (37.5%)	4 (50%)	1 (16.7%)	2 (33.3%)	3 (50%)
5	Other references	2 (50%)	2 (50%)		3) (37.5%	2 (25%)	3 (37..5%)	4 (66.7%)	1 (16.7%)	1 (16.7%)

Note: Alw = Always, OIW = Once in a week, OIM = once in a month, TIS = Twice in a Semester, and NA = Not at All

Implementing Selected Methods of Teaching

The confirmation level given by respondents regarding selected methods of teaching for 1 – 4 cycle and for 5 – 8 cycle teachers was as follows.

More than 50 percent of the teachers of all sample 1-4 cycle teacher groups frequently (at least once in a week) used lecture, and questions and answer in their teaching activities (see table 16-A). Similarly, except teachers of Gudoberet CRC, the majority of the other three sample teachers groups dominantly use giving notes on chalk board as means of teaching. The above three confirmed indicators could indicate that most of the activities of the sample teachers groups were in favour of traditional method of teaching.

Table 4.16A Percentage of frequencies of the four sample groups of grade 1-4 teachers on implementing selected methods of teaching

No	Teaching methods	Percent of teachers by groups and frequencies											
		Non-NGO CRC of Balambaras Yilma			ADA supported CRC of Enewary			BESO supported CRC of Gudo Beret			Non clustered schools		
		ALW / OIW	OIM	TIS /NA	ALW / OIW	OIM	TIS /NA	ALW / OIW	OIM	TIS /NA	ALW / OIW	OIM	TIS /NA
1	Teaching through lecture	8 (100%)			12 (100%)			6 (100%)			8 (100%)		
2	Teaching through question and answer	8 (100%)			12 (100%)			6 (100%)			8 (100%)		
3	Teaching through giving notes on chalk board	8 (100%)			10 (83.3%)		2 (16.7%)	2 (33.3%)	1 (16.7%)	2 (33.3%)	6 (75%)		2 (25%)
4	Teaching using open discussion	8 (100%)			12 (100%)			6 (100%)			7 (87.5%)		1 (12..5%)
5	Teaching using group work	8 (100%)			12 (100%)			6 (100%)			8 (100%)		
6	Teaching through role play	8 (100%)			2 (16.7%)	10 (83.35 %)		2 (33.3%)	2 (33..3%)	2 (33..3%)	2 (25%)	4 (50%)	2 (25%)
7	Teaching using projects /project work/		8 (100%)			6 (50%)	6 (50%)	3 (50%)	2 (33.3%)	1 (16.7)		3 (37..5 %)	5 (62.5%)
8	Teaching through guided discovery		2 (25%)	6 (75%)	2 (16.7%)		10 (83.3%)						8 (100%)
9	Teaching through problem solving approach		4 (50%)	4 (50%)	2 (16.7%)		10 (83.3%)				1 (12..5%)		7 (87..5%)

Note: Alw = Always, OIW = Once in a week, OIM = once in a month, TIS = Twice in a Semester, and NA = Not at All

Similar pattern can be observed from the responses of teachers (see Table 4.16A) concerning using open discussion and group work as usual methods of teaching. More than 83.3 percent of all groups of respondents exercised open discussion as common method of teaching. Almost in a better condition 100 percent of all teachers groups confirmed in favor of exercising group work as usually utilized method of teaching. In addition by observing the distribution of percentage

representing confirmation of respondents, a shift from very strong attachment on traditional method of teaching to usual exercising of some elements (open discussion and group work) of participatory method of teaching preferred. Teaching through role play was also the next preferred method of teaching as confirmed by the respondents. 100 percent of Balambaras Yilma Woldeyes CRC, 25 percent of non clustered schools and 16.7 percent of Enwary CRC teachers groups used to utilize teaching through role play at least once in a week. Besides, 33.3 percent of the Gudoberet CRC teachers sample group proved the use of role play at least once in a week or always.

Regarding teaching using project work Gudobert CRC teachers sample group became the leading in utilizing project work for teaching-learning process. A total of 50 percent of them utilized project work always or at least once in a week. Except in this sample group, this method of teaching was not confirmed as usually exercised method. Next to this, two of the describers of participatory method of teaching (teaching through guided discovery and teaching through problem solving approaches) were not exercised so much almost by all sample groups of teachers.

The opinion of respondent teachers revealed almost the same frequencies of using each of the selected methods of teaching in 5- 8 cycle of the same sample groups (see Table 4.16B). For instance, teaching through lecture and through question and answer were confirmed as frequently exercised activities by 100 percent of Balambaras Yilma Woldeyes CRC, by about or above 83.3 percent respondents of Enewary CRC, and Gudoberet CRC teachers groups. Teaching through giving notes on chalk board was also repetitively confirmed by respondents. Thus, most respondents' confirmation favored traditional method of teaching. The use of open discussion and group work were confirmed by the sample respondents almost equally. Respondents of Enwary CRC, and Gudoberet CRC's 88 percent respondents confirmed in favor of teaching using open discussion and group work. Similarly, from Balambaras Yilma Woldeyes CRC teachers group confirmed that 50 percent for always and the remaining 50 percent for at least once in a week in exercising open discussion. Group work was also utilized at least once in a week by 50 percent of respondents of this same sample group. Finally, except the respondents from Gudoberet CRC teachers group, the other respondents confirmed that the use of project work, guided discovery, and problem solving approaches were the least utilized or totally unknown method for implementation.

Annex 4.16B Percentages of Frequencies of the three sample groups grades 5 – 8 teachers on implementing selected methods of teaching case confirmed by respondents

No	Teaching methods	Percent of teachers by groups and frequencies								
		Non-NGO CRC of Balambaras Yilma			ADA supported CRC of Enewary			BESO supported CRC of Gudo Beret		
		ALW / OIW	OIM	TIS /NA	ALW / OIW	OIM	TIS /NA	ALW / OIW	OIM	TIS /NA
1	Teaching through lecture	4 (100%)			7 (87.5%)	1 (12.5%)		5 (83.3%)	1 (16.7%)	
2	Teaching through question and answer	4 (100%)			8 (100%)			6 (100%)		
3	Teaching through giving notes on chalk board	2 (50%)	2 (50%)		3 (37.5%)	1 (12.5%)	4 (50%)	5 (83.3%)		1 (16.7%)
4	Teaching using open discussion	4 (100%)			8 (100%)			5 (83.3%)		1 (16.7%)
5	Teaching using group work	2 (50%)		2 (50%)	8 (100%)			6 (100%)		
6	Teaching through role play		2 (50%)		3 (37.5%)		5 (62.5%)	1 (16.7%)	1 (16.7%)	4 (66.6%)
7	Teaching using projects /project work/		2 (50%)	2 (50%)		2 (25%)	6 (75%)	1 (16.7%)	5 (83.3%)	
8	Teaching through guided discovery			4 (100%)		1 (12.5%)	7 (87.5%)	1 (16.7%)		5 (83.3%)
9	Teaching through problem solving approach			4 (100%)	3 (37.5%)	4 (50%)	1 (12.5%)	4 (66.7%)	2 (33.3%)	

Note: Alw = Always, OIW = Once in a week, OIM = once in a month, TIS = Twice in a Semester, and NA = Not at All

Ranking Simplicity Level of Implementing Selected Methods of Teaching

Teaching through lecturing and question and answer were confirmed as simplest in implementing by both cycles of sample teachers group. Difference was recorded by respondents 5-8 cycle of Gudobert sample teachers group for teaching through lecturing. Teaching by making students copy notes from chalkboard was also selected as the second simplest method in implementing by all respondents. Teaching through open discussion was also confirmed as the leading simplest implemented teaching method by all respondents except by Balambaras Yilma Woldeyes CRC 1 – 4 cycle teachers. Teaching through group work was ranked as leading simplest implemented

method of teaching by all CRC participated 1 – 4 cycle teachers and by Balambaras Yilma Woldeyes CRC 5 – 8 cycle teachers.

Percent of the Sample Group of Teachers who ranked Simplicity Level of Implementing Selected Activities & Methods of Teaching (As confirmed by the four Group of Teachers of Grades 1- 4)

Table 4.17 Percent of teachers who ranked simplicity level of implementing selected methods of teaching

No	Teaching methods	Rank of siplicity	Percent (%) of teachers by sample groups						
			1-4 cycle				5-8 cycle		
			CRC of B.Y.W. No=.8	CRC of Enewary No=12	CRC of Gudoberet No=.8	Non-CRC schools No=.8	CRC of B.Y.W. No=.4	CRC of Enewary No=8	CRC of Gudoberet No=.6
1	Teaching through lecture Teaching through question and answer Teaching by making students copy notes from chalk board	1-3	87.5	83.3	100	87.5	100	87.5	16.7
		4-6	12.5	8.3		12.5		12.5	33.3
		7-9		8.3					50
2	Teaching through open discussion Teaching through group work Teaching using role play	1-3	100	91.7	83.3	100	100	100	50
		4-6			16..7				16..7
		7-9		8.3					33.3
3	Teaching using projects work Teaching using guiding discovery method	1-3	12.5			12.5	50	25	16.7
		4-6	87.5	100	16.7	87.5	50	50	33.3
		7-9			83.3			25	50
4	Teaching through lecture Teaching through question and answer Teaching by making students copy notes from chalk board	1-3	75	66.7	33.3	100	25	87.5	83.3
		4-6	25	25	50		75	12.5	16.7
		7-9		8.3	16.7				
5	Teaching through open discussion Teaching through group work Teaching using role play	1-3	62.5	50	50	25	75		83.3
		4-6	12.5	41.7	50	75	25	50	16.7
		7-9	25	8.3				50	
6	Teaching using projects work Teaching using guiding discovery method	1-3		75	16.7	12.5			33.3
		4-6	87.5	25	83.3	62.5	50	75	16.7
		7-9	12.5			25	50	25	50
7	Teaching through lecture Teaching through question and answer Teaching by making students copy notes from chalk board	1-3							
		4-6	12.5	33.3	16.7	25	50	50	100
		7-9	87.5	66.7	83.3	75	50	50	
8	Teaching through open discussion Teaching through group work Teaching using role play	1-3		8.3					
		4-6		8.3				12.5	
		7-9	100	83.3	100	100	100	87.5	100
9	Teaching using projects work	1-3		8.3					16.7
		4-6			50				16.7
		7-9	100	91.7	50	100	100	100	66.6

Teaching through role play was considered as the leading simplest implemented method of teaching only by Enewary CRC teachers group. The others gave it second rank for this item. Teaching through project work, guided discovery and problem solving approach were not considered as simple by all of the respondents. Finally, almost all of the answers given in this ranking was found to be consistent to the previously identified data on the implementation of continuous assessment.

Ranking difficulty level of Implementing Selected Activities of Teaching

From ranking of difficulty level on selected activities of teaching given by respondents of sample teachers group (see Table 4.18A and B), we can infer the following points.

1. Doing action research and preparing portfolio record book for timely recording of experiences and present it for approval ranked as leading difficult task by all sample teachers groups.
2. Using science kit was also ranked as one of the leading difficult activity ranked by all sample 1-4 cycle teachers groups and by Gudoberet CRC 5-8 cycle sample teachers group.
3. Implementing continuous ment was also ranked as one of the difficult activities reported by non CRC participating teachers and by all sample 5-8 cycle teachers groups.
4. Implementing student center teaching methods and preparing teaching aids were considered as part of the difficult activities ranked by non- CRC participating teachers.
5. Implementing planned support for needy especially female students was considered as one of the leading difficult task by 62 percent Balambaras Yilma 1-4 cycle sample teachers group.
6. Presenting lesson by adapting it to the local environment was also considered as part of the difficult task by 5-8 cycle Balambaras Yilma Woldeyes CRC and Enewary CRC teachers groups.

Table 4.18 Percent of teachers who ranked difficulty level of implementing selected activities of teaching

No	Teaching methods	Rank of simplicity	Percent (%) of teachers by sample groups						
			1-4 cycle				5-8 cycle		
			CRC of B.Y.W. No=.8	CRC of Enewary No=12	CRC of Gudoberet No=.8	Non-CRC schools No=.8	CRC of B.Y.W. No=.4	CRC of Enewary No=8	CRC of Gudoberet No=.6
1	Doing action research	1-3	100	91.7	100	87.5	75	100	83.3
		4-8		8.3		12.5	25		16.7
		9-11							
2	Reflecting daily work experience to colleagues	1-3		25		12.5		12.5	33.3
		4-8	37.5	75	16.7	50	50	50	16.7
		9-11	62.5		83.3	37.5	50	37.5	50
3	Implementing continuous assessment	1-3	37.5			75	100	87.5	33.3
		4-8	50	58.3		12.5		12.5	66.7
		9-11	12.5	41.7	100	12.5			
4	Using science kit	1-3	100	75	100	100		25	66.6
		4-8		25				62.5	16.7
		9-11					100	12.5	16.7
5	Implementing students-center teaching methods	1-3	12.5	8.3		75		12.5	33.3
		4-8	75	58.3	16.7	25	100	75	50
		9-11	12.5	33.3	83.3			12.5	16.7
6	Preparing lesson plan that enables students participate and to implement continuous assessment	1-3	12.5					50	
		4-8	75	100	83.3	25	100	50	83.3
		9-11	12.5		16.7	75			16.7
7	Preparing teaching aids	1-3				75			
		4-8	100	50	100	25	75	62.5	100
		9-11		50			25	37.5	
8	Preparing portfolio record book for timely recording of experiences and present it for approval	1-3	87.5	91.7	83.3	87.5	75	87.5	83.3
		4-8	12.5		16.7	12.5	25	12.5	16.7
		9-11		8.3					
9	Implementing planned support for needs especially female students	1-3		8.3			25	12.5	50
		4-8	62.5	75	100	25	75	62.5	50
		9-11	37.5	16.7		75		25	
10	Presenting lesson by adapting it to the local environment	1-3		16.7	16.7	25	50	37.5	33.3
		4-8	37.5	25	83.3	37.5	50	25	16.7
		9-11	62.5	58.3		37.5		37.5	50
11	Utilizing the already prepared teaching aid	1-3						12.5	
		4-8			100	25			16.7
		9-11	100	100		75	100	87.5	83.3

Opinion of the Three CRC Sample Teachers on the Benefits of CRCs Experiences

All of the sample teachers groups have positive opinion about the benefits they received from participating in cluster resource centers. However, in relative position, Gudoberet CRC of 1-4

cycle sample teachers and Balambaras Yilma Woldeyes CRC of 5-8 cycle sample teachers groups had the strongest positive opinion towards the benefits they got from CRC participation.

Table 4.19 Mean Scores of the Opinions of the three CRC Sample Teachers on the Benefits of CRCs Experiences

Woreda	Cycle	# of teachers	Attained mean	Expected mean	Difference
Ankober	1-4	8	8.125	3	+5.125
	5-8	4	17	3	+14
	All	12	11.083	3	+8.083
Basona Worana	1-4	6	15.219	3	+12.219
	5-8	6	11.037	3	+8.037
	All	12	13.128	3	+10.128
Moretna Jirru	1-4	12	6.950	3	+3.95
	5-8	8	10.426	3	+7.426
	All	20	8.541	3	+5.541
Total	1-4	26	9.220	3	6.22
	5-8	18	12.090	3	9.09
	All	44	10.395	3	7.395

Opinion of Supervisors and head Teachers on some Selected CRC Related Issues

All respondents of head teachers and CRCs' supervisors agreed that CRC's training met teachers' real classroom problems. They substantiated their answer by citing some important topics of trainings which were considered as part of short comings of many teachers. These were implementing continuous assessment, participatory methods of teaching, action research. According to respondents from Gudoberet and Ankober CRCs, some of the problems which were tried to address through trainings in CRCs could not be implemented well by the trained teachers yet. For instance, the use of science kit materials in classroom activity, doing action research, activities related to portfolio, implementing student centered method of teaching, continuous assessment in 5-8 cycle grades, were still perceived as poorly implemented.

The supervisors and head teachers of all CRCs proved that, (with some reservation) the performance of teachers has been improved as a result of training provided in CRC. They indicated, as evidence the use teaching aids, participatory method of teaching, continuous assessment, stimulating classroom organization and preparing quality lesson plan had began improved as a result of trainings provided in CRCs. Besides, the possibility of colloquial

trainings understood and had began implemented after participating in CRCs. The reservation of these respondents explained through two points. The first one was that the training topics delivered in CRCs were given indiscriminately to all teachers of the respective CRC. This created bored attendants of particular training in CRC on behalf of those that had no demand for that training topic.Secondly, the obligation laid on teachers of schools of CRC member to come from distant location about (2hrs walking distance) without any per diem. This has negatively affected the motivation of teachers to participate attentively the trainings and benefited best out of it.

Moreover, based on the information given by all respondents, it was proved that the training topics were used to be selected by supervisors of the respective CRC, head teachers and teachers themselves. However, it is reported that strong procedure was followed in Gudoberet CRC. In this CRC, training need assessment was being made through classroom observation and teachers own demand. Then, the selected topics would be communicated to DBTTC's-CRC coordinators for prior preparation. It is after this process the training was held.

The major problems encountered in the activities of CRC were reported as: low level professional capacity of school teachers to train each other, location of CRC member schools being far from CRC, the consideration of teachers as an extra duty of participating in the training, and shortage of important materials (like photocopier and printer). Consequently, in order to alleviate these stated problems some solutions were suggested by the respondents. These were: enriching the professional capacity of the assigned trained before the training being held, connecting CRC trainings with continuous professional development (CPD) activities, plan trainings selectively to address the needy teachers group even within a single CRC, and assigning more budget.

Finally it was reported that Gudoberet CRC was supported by BESO through DBTTC's-CRC coordinators on preparing and provision of trainings to teachers of the CRC. Besides, regular followups were made through supervising the activities in person and through reports. Similarly, Enewary CRC was supported by ADA. The support could be explained in terms of material provision and technical support. The technical support targeted on creating professional capacity of teachers within the CRC.

4.6 Findings and Discussion

Findings of the Study

Regarding the three CRC and one non CRC participating sample teachers groups considered in this study the following major findings could be secured.

I. Major findings from documents showing the implemented CRC trainings.

1. Key pedagogical issues were addressed through trainings in the three CRCs. Some of the issues were topics which could be related to daily classroom activities. These included lesson planning for active learning activities, modern methods of teaching, continuous assessment, attractive classroom organization and management, preparing and using teaching aids, how to utilize science kit materials, communication skills in classroom, managing self contained classes and the likes.

2. Important teaching professional issues like doing action research, recording and keeping students' learning performance and even teacher's own experience, methods of evaluating curriculum materials, gender and HIV/AIDS were also addressed at various depth in all the three CRCs.

3. Though attempt was made to cover all CRCs by DBTTC, high emphasis was observed on Gudoberet CRC due to special support of BESO through DBTTC. As a result, direct intervention of DBTTC on the three CRCs for the last two years were 126 hours, 24 hours, & nil for Gudoberet, Enewary, and Balambaras Yilma Woldeyes CRCs respectively. Similar, pattern was also observed in terms of numbers of training topics.

II. Major findings on the profile of sample teachers.

1. The majority of the sample teachers groups from the three CRCs were found above 30 years old age group, 10 year services in teaching, more than two years school cluster experiences, and teachers or above level in the teaching professional ladder. Whereas, the majority of the sample teachers group from non-CRC participating group were found less than 30 years old.

Besides, their years of service in teaching were not greater than 10 years. Except one teacher the others could not reach at teacher level in the teaching professional ladder.

III, Major findings from observation of the performance of sample teachers

1. CRC participating teachers performed relatively better than that of teachers who didn't participate in activities of CRC. This is evidently observed by mean value indicators used for assessment. The highest mean value calculated for non-CRC participating teachers group on the use of traditional method of teaching by itself used as a sign of unfavorable performance.

2. Comparisons between CRC participating teachers groups on one side and teachers who didn't participate in CRC on the other side were largely favoured CRC participating teachers. This was clearly observed by considering the t-test values of the eleven selected indicators. Out of the eleven selected observable indicators of performance the level of mean difference of eight indicators were statistically significant infavour of CRC participating teachers.

3. In contrasting performances of CRCs participating teachers by support type, comparisons were made between NGO supported CRC groups and non-NGO supported CRC teachers group of Balambaras Yilma Woldeyes primary school CRC. The result favoured NGO supported CRC teachers group. This can be observed through t-tests of the level of mean differences for eleven selected observable performance indicators for 1-4 cycle. Besides, the t-values calculated for 5-8 cycle teachers indicated significance difference infavour of NGO-supported CRC teachers group in seven out of eleven indicators. For the remaining indicators, subject matter knowledge and proficiency, use of traditional method of teaching & coherence of planned and presented lesson the differences were not significant showing almost similar position. In this cycle the t-value -4.655 indicated the presence of statistically significant difference favoring non-NGO supported teachers group on preparation & application of teaching aids.

4. Within the two NGO supported CRC teachers groups (Gudobert and Enewary), the comparison on performances of teachers revealed that BESO supported CRC teachers group led the other. In terms of mean values of the eleven indicators ranked first for nine of them in 1-4and five of them in 5-8 cycles by BESO supported CRC.

5. Except in the use of portfolios and self follow up document keeping, in the others selected observable performance indicators (classroom organization & management, lesson plan quality, implementation of continuous assessment, subject matter proficiency, communication skill, utilization of teaching methods, preparation & utilization of teaching aids, coherence of planned & implemented lesson, and managing self-contained class) 1-4 cycle of BESO supported Gudoberet CRC teachers group exhibited better mean values.

IV. Major findings concerning teachers opinion on selected main features of teacher performance and CRC related issues

1. In preparing lesson plan, the usually consulted materials were found to be students textbook and teacher's guide. Syllabuses were referred rarely or not at all. Similarly, consulting reports of last lesson plan implementation was not well known by all sample teachers groups. Besides, differences were not noticed in utilizing these materials by all sample groups. Nevertheless, better inclination in using other reference materials than in consulting syllabuses was confirmed by all CRC sample groups especially by Gudoberet CRC group.

2. Dealing with confirmed implementing selected methods of teaching by respondent teachers, four classes of trends were identified.

    - First, strong attachment was confirmed to the use of traditional method of teaching represented by teaching through lecture, question and answer, and giving notes on chalkboard. Little variation was reflected by Gudoberet and Enewary CRCs in favor of giving less attention to teaching through giving notes on chalkboard.

    - Second strong attachment was also exhibited by all sample groups towards teaching using open discussion and using group work. These two attachments showed us a trend of mixed use of traditional method of teaching, open discussion and group work from participatory methods. Thus, it might indicate a shift from strongly teacher dominant teaching activity to participatory one.

    - Third, medium attachment was given to role-play and project methods of teaching, though project method was also additionally practiced by Gudoberet CRC group.

- Fourthly, the use of guided discovery and problem solving approaches of teaching were the least frequently used elements. This might indicate that these methods are unknown to many of the teachers of the sample groups.

3. Regarding the simplicity ranks given to selected method of teaching, the majority of teachers of all sample groups gave leading ranks to elements of traditional method of teaching. Similarly, teaching through open discussion and group work were also ranked as part of the leading simplest part. However, teaching through project work, guided discovery, and problem solving approaches were ranked last in simplicity level.

4. Concerning difficulty levels of implementing selected activities of teaching firstly, the majority of respondants of all sample teachers group gave leading rank level to action research, preparing portfolio record book for timely recording of experiences and present it for approval, and using science kit materials.

   Secondly, implementing continuous assessment, student center teaching methods, and preparing teaching aids were considered as the leading difficult tasks by non-CRC participating teachers. Thirdly, it was also reported that presenting lesson by adapting to the local environment as difficult by 5-8 cycle teachers of Balambaras Yilma Woldeyes and Enwaary CRCS.

5. The majority of CRC participating teachers showed strong positive opinion on the practical advantages gained from participating in activities of CRCs.

Discussion

The findings of the study have given answers to the basic questions and have close relationships with major points reviewed in the literature part of this paper.

One of the basic questions of this study was that about the coincidence of implemented training curriculum of CRCs with the designed trainings. In attempting to answer the basic question, it is important to remind that one of the four designed functions of school clustering was pedagogical.

The previously held and still being used teacher dominant teaching culture was considered as a problem to implement the new curriculum that is said to be advocating for the use of problem-solving and participatory teaching approaches. Thus various participatory teaching methods

explained in active learning, classroom organization and management suitable to active learning, lesson planning that reflect participatory teaching-learning activities, continuous assessment, student support mechanisms, action research and the likes were targeted topics to be touched by CRCs. Considering these as designed training topics, as it became clear in the analysis and findings, most of the topics addressed in CRCs of the sample groups reflected the designed training curriculum. Moreover, the findings were consistent to the points stated by many cited scholars like Villegas–Reamers (2003:39-40), Leu (2004), Borko and Putnam (1995:36), Dejenozka (1983:36), and TESO in service documents in the literature of this paper. Besides, the delivered training topics were found similar with what Assefa (2003) reported. However, variations among the three sample CRC groups were observed in terms of types of topics covered in trainings, duration and frequency of time spent for each topic, and in the quality of trainers.

As a result BESO supported Gudoberet CRC was found as more advantages in covering wider topics, getting longer duration of time for each session and from being supported by DBTTC than that of the other CRCs. ADA supported Enewary CRC was found advantageous in getting wider coverage of training topics and support from DBTTC next to Gudoberet CRC. What makes Enewary CRC different was that it has got a new training i.e. need assessment teqhnique by the name of 'how to find a trainer of trainee'. This training conduced them to select training topics using various need assessment, and to select, among themselves, capable teacher who can handle the selected training topics. Such method of training was assumed by ADA's expert as promising to build self confidence of school teachers and become self reliance within the school. Besides, it was also found consistent to one of the school clustering objectives indicated in this literature that expects colleague based learning through active participation of school teachers. In connection to these points, Balambaras Yilma Woldeyes CRC found the least served. Thus, regarding the question for coinciding of designed and implemented CRC curriculum among the three sample CRC groups of this study, the answer could be yes that the implemented training was in accordance to the planned one but at varied level.

The second basic question demanded to check whether the implemented training of CRCs brought the desired impact on professional competence of primary school teachers or not. In view of this basic question, the findings were examined. As a result, the responses given and collected through self rating, ranking in difficulty levels and simplicity levels were found indicating to the

same conclusion. Thus, it can be argued that the internal consistency of responses was proved. The responses given by respondents and results found from performance observation indicated that CRCs participating teachers were responsive to many of the indicators (training topics) they were trained for in their respective CRC. This findings also seem in agreement with the statement presented in the literature that indicated the increasing need of applying student centered teaching learning activities is going to be met. Thus, it can be argued that the implemented training in CRC has been promising to bring the desired impact on professional competence of primary school teachers. However, according to the responses of supervisors and head teachers, some of the important training topics like action research and the use of science kit could not be implemented well as it was expected.

Regarding the observation of sample teachers groups and as supplemented by responses collected from observed teachers varied results were attained. The variation in observed performance of teacher's of the sample groups favoured CRCs participating teachers. Thus, within the limitation framework of this study, it can be argued that this variation attributed to the training activities made in CRCs.

Besides, since the sample teachers have more or less similar characteristics in educational qualification, service years in teaching and the likes, the argument forwarded in the literature by Warwick and Reimers (1972) and Eraut (1994) seems supported by this finding. These writers argued that initial professional education of conventional teachers' education has shown in many cases to have little impact on classroom interaction. The finding of this paper could also be additional case strengthening this idea. Hence, it can be asserted, based on the finding of this study, that the demanded professional competence of primary school teachers has been relatively attended as a result of participating in CRCs. This was also confirmed by responses coming from supervisors and head teachers.

In examining variations on performances of primary school teachers supported differently in support types provided to CRCs, ADA supported Enewary CRC and BESO supported Gudoberet CRC were compared. The result favourerd BESO supported Gudoberet CRC. This could be due to variations in the type and intensity of supports rendered.

ADA's interest in helping Enewary CRC revolved around helping ADA sponsored alternative basic education (ABE) centers found around Enewary. This support to their ABE centers were planned to be realized via Enewary CRC. Having this in mind, ADA's provision of training was mainly limited in training of selected CRC members through workshops by expecting that the workshop participants would retrain their colleagues when they went back to their respective CRC. Thus, only in two trainings that DBTTC made to involve. Besides training provision, ADA had also provided important materials like photocopier and computer to Enewary CRC.

Based on the responses of the informants from DBTTC, BESO's interest in Gudoberet CRC was part of the general focus of helping the education sector. BESO worked closely with DBTTC as a partner. The topics covered in training of Gudoberet CRC found to be wider than that of Enewary's. Most of the trainings were handled in support and with close follow up of DBTTC. Due to these variations in supports, it seems that variations in performances of sample teachers were observed. Besides, not only on observed performances, but also on opinions the trends of variation could be found reflective of this support type to a limited level.

CHAPTER FIVE

5. SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary and Conclusion

The main purpose of this study was to examine the contribution of existing activities of CRCs in enhancing professional competence of primary school teachers. The study was delimited by geographical area to north Shewa of Amhara region. It was also restricted to the pedagogical aspects of the profession. Besides the research work appreciated some limitation of the study. These were the presence of extraneous factors like school management and leadership type, personal effort of individual teacher that affect teachers professional competence, budget and time constraints to collect data of each observed teacher performance for longer period of time.

Within the framework of these limitations, the study attempted to answer four basic questions. The first one was focusing on the mismatching/matching of the implemented and designed training curriculum of CRCs. The second was that whether professional competence of CRC participating primary school teachers better than those who didn't participate in CRCs or not. The third one questioned whether NGO supported CRC teachers have better professional competence than those non-NGO supported or not. The final basic question was about the results of varied intervention of NGOs in CRCs.

To meet the purpose of this research, by creating acceptable conceptual framework, relevant related literature review was made. The literature review provided us with conceptual understanding of what school clustering means. Thus, school clustering were understood as mechanisms or a kind of localized forum serving for on-job based professional development through cost effective method. It also encourages peer teaching so that using and enriching local human resource can be possible. Due to this condition, in most of the related literature reviewed, it is found that activities of school clustering were related to teachers' continuous professional development. In this way, the reviewed literature supplemented our understanding on school clustering by including various experiences and models of school clustering in connection to continuous professional development of teacher. Finally, important points were also identified about the beginning of school clustering in Ethiopia and why CRC became necessary in Ethiopia

and Amhara Region. Thus the intention of bringing the experiences of school clustering to Ethiopia was to take the advantage of working in CRCs so that the provision of quality education could be possible.

To arrive at plausible conclusion, a casual-comparative research method was employed. The sample areas were four Woredas (Ankober, Basona Warana, Moretna Jirru, and Minjar Shenkora).

From the first three Woredas, one sample CRC, and from the Woreda of Minjar Shenkora two schools were selected based on purposive sampling. The three CRCs and the two schools from Minjar Shenkora were selected to reach each of the target groups: non-NGO supported Balambaras Yilma Woldeyes primary school CRC, BESO-supported Gudoberet primary school CRC, ADA supported Enewary primary school CRC and non-CRC participating school teachers of Minjar Shenkora. In addition, the two cycles of primary schools (1-4 and 5-8) were treated separately to see the detailed characteristics. The numbers of sample teachers from each sample groups was made to be at least 35 percent of the total number of each sample group.

For the purpose of collecting data basically four types of instruments of data collection were utilized. These were: i) training inventory form, ii) document and classroom performance observation rating scale, iii) Questionnaires of Likert type and rank-order type presented to observed school teachers; and also open-ended response questionnaire was presented to CRC supervisors and head teachers. iv)Interview guide also presented to DBTTC's-CRC coordinators and Woreda education office experts. Finally the collected data was presented using tables and analyzed using percentages and one tailed t-test values for comparison of the sample groups. The results were also interpreted qualitatively by adding the information collected through open-ended answer seeking questionnaire and answers coming from interview.

Regarding the basic personal information of the sample observed respondent teachers, the majority of them were found as they have homogenous profile explained in terms of age, years of experience in teaching, years of exposure in CRC activities, and in level of teaching on the basis of teaching professional ladder.

Finally the study brought us with several findings which could be presented in relation to the basic questions of the research as follows:

a) The first basic question was presented whether the implemented training curriculum of CRC was the same with the designed one or not.

From the study made it was found that key pedagogical issues which are helpful in the daily classroom activities were addressed in the trainings of CRCs. Besides other issues related to teaching professional activities were also touched. The majority of training topics were also found consistent to the planned training topics. However, the trainings were delivered differently in the three sample CRCs. The variation in the delivered trainings could be explained in terms of three aspects. These were: in number of topics covered, time devoted to teach session, and in terms of the professional background and exposure of the assigned trainers to each topic. Therefore, we can conclude that the implemented training curriculum in CRCs was found the same with the previously designed training curriculum in CRCs. But variations were observed in implementation.

b) The second basic question of the research was questioning whether professional competence of CRC participating primary school teachers better than those teachers without CRC participation.

In order to get answer for this question data was gathered through performance (from both classroom and documents) observations.

The attained mean score of each main feature used as performance indicator was compared and between CRC participating group & non-CRC participated group.

The result was that in ten out of eleven performance indicators, CRC participating teachers exhibited higher mean scores. This result was also supported equally by the opinions of the respective sample teachers groups. As a result, it can be inferred that the implemented training of CRCs relatively brought the desired impact.

c) The third basic question was asking if professional competence of primary school teachers of NGO supported CRCs better than those non-NGO supported CRC or not.

To answer this question, the data collected from NGO supported CRC participating sample teachers group was compared against the data gathered from non-CRC participating teachers. The result was that relatively better performance of teaching was observed from NGO supported CRC participating teachers group than the non- NGO

supported CRC participating teachers group. The difference between their performances was found statistically significant in favor of NGO supported CRCs participating teachers group. As a result it can be argued that the attained performances and opinion on behalf of NGO supported CRC participating sample teachers group was the result of AED/BESO and ADA intervention in CRCs.

d) The last basic question led us to find answer if there is variation on performance of primary school teachers as a result of varied intervention of NGOs in the CRCs.

To find answer for this question it was necessary to make comparisons among the results of the two CRCs of AED/BESO and ADA support receiving sample teachers groups.

In this comparison, the calculated t-values for mean differences of eight out of were eleven for 1-4 cycle indicators found statistically signficant in favor of AED/BESO supported Gudoberet CRC than supported Enewary CRC group.

In conclusion the findings of this study, generally asserted that cluster school system contributed in improving the level of professional competence of teachers in the study area of this research.

5.2 Recommendation

It is understood that the study came up with a relatively positive result to the basic questions. However, some gaps were observed in the study. Thus, to help the speeding up of professional development through CRCs, it becomes necessary to suggest the following recommendations.

1. Regardless of their similarity in age, educational qualifications, and years of service in teaching and CRC exposure, variations in performances were observed among CRC participating teacher groups. The variations were in favor of the CRC groups that got outsider support.

   This created basis to answer positively that varied intervention in CRC's could bring variation on performance of primary school teachers. The result by itself may encourage the need for close professional support and follow up to CRCs so that to speed up realizing the desired impact on teachers' professional competence. Other wise, it seems that mere organization of schools into CRCs may not make teachers bring differences on what they did before and on what they are doing at present.

On the other hand it is known that one of the basic purposes of CRC is enriching the capacity of teachers using local school human resources. However, until this human resource group enter into the desired change pipeline system, it seems necessary to use practical outsider support that help school teachers technically. This outsider support can activate better professional movement among teachers. Besides, this outsider support should also be planned to continue until the school teachers are proved in managing continuous professional development by themselves.

2. As it is understood from this study, each teacher of all CRC members, without discriminating those who demanded it and was not forced to attend the training. However, since professional competence of teachers mostly realized in classrooms individually, it is necessary to think about and work for individual training need focused support.
3. As we have learned from the findings of this study, some of the delivered training topics like doing action research, keeping and portfolio records, using, using science kit material could not be implemented well by teachers. The finding explained in this paper on implementation of continuous assessment was based aggregate results of six qualifiers. From these six qualifiers most teachers paid little emphasis on targeting learning behavioral assessment. Furthermore, from participatory teaching methods only group work and open discussion were repetitively used, by giving very little emphasis on using discovery and problem solving methods. These shortcomings indicate the need for further emphasis on how they are practically interpreted. Thus, further practice oriented training should continue to speed up the already exhibited promising change.
4. Further research might be necessary to investigate the contribution of school leadership style in enhancing teachers' professional competence. It might also be necessary to examine the relationship of teachers professional concern level and professional competence.

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APPENDIX A

School Cluster Based Continuous Professional Development Delivered Training Inventory format

Woreda _____ Name of cluster _____School_____

Duration of one training session (average) _____

Training				Trainer source (Write name of the institution)	Number of participants			Remark
Date	Number of session	Content	Method		Male	Female	Total	

APPENDIX B

Document Observation Rating Scale

Preliminary Information of Document Observation.

Woreda _____ Teacher's sex _____ Grade _____ Date _____

Cluster _____ Years of service _Subject observed____Time_

Mark✓ for first observation day ( ) or, second observation day ( )

Rating key:- Excellent(Ext-5), if it is performed/seen without any inconvenience.
Very Good (VGd-4), if it is performed/seen with little inconvenience.
Good (Gd-3), if it is performed/seen satisfactorily.
Poor (Pr-2), if it is performed/seen poorly.
Very Poor(Vp-1), if it is seen/performed extremely below the expectation.

No	Lesson Plan document observation	Ext	VGd	Gd	Pr	Vp	Comment
1	On lesson plan quality						
1.1	Objectives are written in terms of observable behavior of students						
1.2	Introduction technique is promising to attract students						
1.3	Indicate detailed students activities to be performed timely using media materials to maximize students' activities.						
1.4	Indicated tasks correspond to stated objectives & contents						
1.5	Planned tasks of student provide opportunities for individual differences among students.						
1.6	Indicates appropriate instructional media						
1.7	Assessment technique is clearly stated & correspond to the written objectives and content						
1.8	Incorporate lesson summary.						
2.	Portfolios & Follow - up document observation						
2.1	Teacher's activity to notice the practical strength & weakness of instructional strategies so far utilized in her/ his class						
2.2	Teacher's activity to record & report suggestion for the curriculum to be improved						
2.3	Ability of teachers to give planned & special support for the needy (particularly girls) students						
2.4	Teacher's ability to record other daily class experiences						

3	Continuous assessment document /students' exercise book observation						
3.1	Evaluating students frequently using varied assessment techniques like observation individual work , class work, home work, tests ,group work, project work etc in a balanced way						
3.2	Ability of evaluating student frequently using each of the above ways by incorporating the designed behavioral changes of learner.						
3.3	Ability of recording student result collected from continuous assessment . behaviorally						
3.4	Ability of recording student result collected from continuous assessment . Numerically						
3.5	Ability of keeping adequate record of continuous assessment for the purpose of modifying the lesson.						
3.6	Ability of giving timely feedback on written assignments & results of continuous assessment.						

APPENDIX C

Teaching Performance Observation Rating Scale

Direction

This performance checklist covers 8main items and a total of 39performance indicators. The observer is required to:

1. use one copy for each observation;
2. write the general information on part A;
3. bring the lesson plan of the teacher observed with you before starting classroom observation;
4. Rate the performance of the teacher observed on the respective five-point –scale given by putting thick (✓) mark. If you want to give comment on each indicator you can write it precisely on the respective comment column.

Woreda _____ Teacher's sex _____ Grade _____ Date _____Time _____
Cluster _____ Years of service _____Subject observed_____School _____
Mark✓ for first observation day ( ) or, second observation day ( )

Rating key:- Excellent(Ext-5), if it is performed/seen without any inconvenience.
Very Good (VGd-4), if it is performed/seen with little inconvenience.
Good (Gd-3), if it is performed/seen satisfactorily.
Poor (Pr-2), if it is performed/seen poorly.
Very poor (Vp-1), if it is seen/performed extremely below the expectation

No	Items observed	Ext	VGd	Gd	Pr	Vp
1	On classroom Organization & Management					
1.1	Student sitting arrangement is suitable so that the teacher can reach each children while the class is going on .					
1.2	Student sitting arrangement is flexible so that it is suitable for various activities of students.					
1.3	Student sitting arrangement makes each student observe the chalk board without difficulty.					
1.4	The class is almost furnished with the necessary posters & charts/teaching learning materials and as a result it is clean & Stimulating to active learning.					
1.5	Modifies the tasks for those who are not learning					
1.6	Organization , allocation, & managing of time , space , activities & attention of students is convenient to provide active engagement of all students in productive tasks.					
1.7	Students are made to feel easy in communicating their behavior					
1.8	Concise directions are given in sequential order					
1.9	Learner is given adequate opportunities for individual practice					
1.10	Teacher follow-ups routine activities					
2	Subject Matter Knowledge & proficiency					
2.1	Teacher's understanding of the content in the lesson					
2.2	Teacher's ability to connect lesson content to the daily life of students					
2.3	Teacher's ability to connect the lesson with previous lesson					

2.4	Teacher's ability to connect the lesson with other subject contents when necessary.					
2.5	Teacher's activity to enable students understand the purpose of the lesson					
3	Communication Skills					
3.1	The use of correct & understandable language by teacher					
3.2	The use of audible voice					
3.3	Communicates effectively in writing					
3.4	Listen students patiently in a stimulating body language when they present their idea/ answer or questions.					
3.5	Calls students by their names					
3.6	Gets learners involved from the start by writing the day's agenda on the board and begins class by reviewing it.					
3.7	Giving timely feedback in questioning & answering process and other activities					
4	On The use of teaching methods in the classroom					
4.1	Traditional meted of teaching					
4.1.1	The use of lecturing has covered much of the time					
4.1.2	The use of asking convergent questions to extend discussions based on the answers					
4.1.3	The use of asking giving notes has covered mach of the time.					
4.2	Participatory methods teaching					
4.2.1	Using guided discovery learning (by allowing/ leading student suggest ways to answer question or solve problems)					
4.2.2	The use of asking divergent questions to extend discussions among students based on the answers.					
4.2.3	Using Inquiry learning (by allowing & helping students generate their own questions and learn through conducting investigation)					
4.2.4	The use of group work					
4.2.5	The use of follow –up of group work (so that to minimize free riders or passive learners and direct the group work as it is planned).					
4.2.6	Using brain storming (through allowing learners present their ideas.)					
4.2.7	Using role play (to connect the lesson with real life).					
4.2.8	Varied instructional processes / activities are utilized to address the content, purposes of instruction & the needs of students.					
5	On Instructional Material preparation & usage					
5.1	Ability to prepare media materials from available resources effectively					
5.2	Utilization of the available and appropriate media materials effectively in relation to the objective & content of the lesson					
5.3	Ability to teach systematically using teaching aids , & chalk boared					
6	Presented lesson correspond to the lesson plan.					
7*	Teaching readiness & ability to manage self-contained classes.					

* For self contained classes.

APPENDIX D

Questionnaire on Teaching Activities

Introduction

This questionnaire is part of the activities of the research entitled "The contribution of school cluster system in enhancing teachers professional competence: the case of North Shewa in Amhara Region". Thus, it is not intended to evaluate and report on you. Its only purpose is to collect data about contribution of school cluster centers.

Your contribution to the success of this study depends on your honest responses for each item stated in the questionnaire.

Thank you for your cooperation

Part I. General

1. Location of the school in which you are serving

1.1 Name of woreda _____

1.2 Name of school cluster _____

1.3 Name of the school _____

2. Respondant's personal information

(Put ✓ on the box you belongs)

2.1 Sex Female ☐ Male ☐

2.2 Age

below 25 years ☐

26-30 years ☐

31-35 years ☐

35-40 years ☐

41-45 years ☐

above 46 years ☐

2.3 Years of service in teaching

below 5 years ☐

6-10 years ☐

11-15 years ☐

16-20 years ☐

21-25 years ☐

above 26 years ☐

2.4 Years of participation in school cluster

No ☐

One year ☐

Two years ☐

Three years ☐

2.5 Qualification in teaching

Have no certificate ☐

12+/10+ TTI certificate ☐

Diploma ☐

Other (explain) _____

2.6 Your position in the teaching professional ladder

Beginner teacher ☐

Junior teacher ☐

Teacher ☐

Senior teacher ☐

Associate lead teacher ☐

Lead teacher ☐

2.7 Subject you teach at present

All subjects in self contained class ☐

Aesthetics ☐

2.8 Write the name of the subject you teach if you are teaching in 5-8 cycle

_____

Part II: On Training Topics

1. Following are training topics provided in CRCs. After reading each training topic put tick mark (✓) under the received column if you participated, or under not received column if you didn't participate in the training. Then, if you received the training, put tick mark (✓) under the column of your agreement to show your response. To what extent the training you participated has been important to you in your regular teaching activities?

No	Training topics	Received	Not received	5 Very high	4 High	3 Medium	2 Low	1 Very low
1	Lesson planning							
2	Participatory and stimulating teaching method							
3	Class room management and organization							
4	Localizing curriculum							
5	Continuous assessment implementation technique							
6	How to do action research							
7	How to use science kit							
8	Teaching in self contained classes							
9	Teaching integrated subjects							
10	How to teach English language							
11	Preparing and utilizing teaching aids							
12	How to prepare and use portfolio							
13	Issues of gender and HIV/AIDS							

If you have additional comment write it on the space provided here

_____

2. Put tick Mark (✓) under the column of agreement level you confirm regarding each of the followings opinion.

No	Opinions on cluster training related issues	5 Strongly agree	4 Agree	3 undecided	2 disagree	1 Strongly disagree
1	The trainings I received so far are the same with the knowledge I already have					
2	The trainings I received so far are teaching-learning implementation technique that I knew before					
3	I gained new concepts from the training					
4	In the training, I have been exposed to new teaching learning methods that enable me to use them in the classroom					
5	The training helped me to improve my teaching performance					
6	I have participated in school cluster trainings in fear of administrative pressure					
7	I implement continuous assessment in each of my class daily					
8	I implement continuous assessment due to administrative pressure					
9	I implement continuous assessment because it helps me to identify students problem and help them					
10	I used to utilize student center teaching method because it gives me time for rest					
11	I used to utilize student center teaching method so as to make my students active and participant					
12	I don't have the interest of preparing teaching aids					
13	Preparing portfolio record book and recording my daily work experience is important to future success of my work.					
14	I have started preparing teaching aids from local resource materials easily.					

15	Trainings provided in school cluster helped me to change my previous classroom management					
16	Trainings provided in school cluster helped me to improve my previous lesson planning experience.					
17	Training provided in school clustering enabled me to do action research.					
18	The training I received from school cluster on gender issue enabled me to support female students					
19	The training I received from school cluster on gender and HIV/Aids enabled me to support students					
20	Based on the trainings provided in school cluster I have started to discuss with my collegues openly about my daily teaching-learning experience					
21	The training given in school cluster on how to teach English language has benefited me to improve my teaching					
22	I have implemented new teaching learning methods that I have trained in school cluster					

3. Following are methods of teaching and other activities related to teaching learning processes. Give your agreement on the level of frequency you have utilized each one, by putting tick mark (✓) under the frequency column stated.

	A. On lesson planning						
No	**Opinions on cluster training related issues**	**5 Always**	**4 At least once in a week**	**3 Utmost once in a month**	**2 Utmost twice in a semester**	**1 Not at all**
1	Using syllabus to prepare lesson plan					
2	Using teacher's guide to prepare lesson plan					
3	Using student's textbook to prepare lesson plan					
4	Using previous lesson plan implementation report to prepare lesson plan					
5	Using other references to prepare lesson plan					

	B. On teaching methods						
No	**Opinions on cluster training related issues**	**5 Always**	**4 At least once in a week**	**3 Utmost once in a month**	**2 Utmost twice in a semester**	**1 Not at all**
1	Teaching through lecture					
2	Teaching through question and answer					
3	Teaching by making students copy notes from chalk board.					
4	Teaching through students' document discussion					
5	Teaching through group work					
6	Teaching through role play					
7	Teaching through project work					
8	Teaching using guided discovery method					
9	Teaching using problem solving method					

4. Rank the following activities according to difficulties you have experienced in implementing them. Rank 1st for extremely difficult one then 2nd , 3rd . . .of 11th to less difficult one.

Activities	Rank 1-11	Reason (If there is)
Doing action research		
Reflecting daily work experience to colleagues		
Implementing continuous assessment		
Using science kit tools in classroom		
Implementing student-center teaching methods in the class		
Preparing lesson plan that enables students participate and implement continuous assessment.		
Preparing teaching aids		
Preparing portfolio record book for timely recording of experiences and present it for approval.		
Implementing planned support for needy especially female students		
Presenting lesson by adapting it to local environment		
Utilizing the already prepared teaching aid		

5. Following are teaching methods to be ranked. Rank each of them 1-9 according to simplicity you have experienced during your teaching learning activities in the class. Rank 1st for extremely easy one, and then 2nd, 3rd . . . and 9th to less easy one.

Activities	Rank 1-9	Reason (If there is)
Teaching through lecture		
Teaching through question and answer		
Teaching by making students copy notes from chalkboard.		
Teaching through discussion that students are dominatingly active		
Teaching through group work		
Teaching using role play		
Teaching using project work		
Teaching using guided discovery method		
Teaching using problem solving method		

APPENDIX E

Questionnaire for Head teachers (School principals), CRC's supervisors of coordinators,

Please give your answer by writing √ mark on the box you agree and by writing short answers on the space provided.

1. Do CRC's training meet teachers' real classroom problems? Yes ☐ Not sure ☐ No ☐

1.1 How do you substantiate your response?

---

2. Is there any thing that teachers are trained for but couldn't implement it?

Yes ☐ Not sure ☐ No ☐

If your answer is yes, which training topic/s can you present as evidence?

---

3. Do you beleave that performance of teachers is improved as a msult of trainings in CRC?

Yes ☐ Not sure ☐ No ☐

3.1 What points /evidences do you have to substantiate your response? ----------

---

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4. Does education office (at any level) decide, for each training, on what training topics to be, duration of training, and who would be the trainer? Yes ☐ Not sure ☐ No ☐

4.1 If your answer is "not sure" or "No", who is the decision maker? Explain ----------

---

---

5. what Major problems are encountered in the activities of CRC?----------

---

---

6. What would you suggest to be done or included in the activities of CRC's in order to solve the major problems encountered? ----------

---

7. If your school cluster is supported by NGO,

7.1 Please, write the name of NGO ----------

7.2 How this NGO control the activities. ----------
