DOCUMENT RESUME

ED 470 507 RC 023 749

AUTHOR Gidey, Maekelech

TITLE Preparing More and Better Teachers: A New Vision of Teacher Development in Ethiopia.

PUB DATE 2002-03-00

NOTE 26p.; Paper presented at the Annual Meeting of the Comparative and International Education Society (46th, Orlando, FL, March 6-9, 2002).

PUB TYPE Reports - Descriptive (141) -- Speeches/Meeting Papers (150)

EDRS PRICE EDRS Price MF01/PC02 Plus Postage.

DESCRIPTORS Collegiality; *Decentralization; Educational Change; *Educational Development; Elementary Education; Foreign Countries; Geographic Isolation; *Inservice Teacher Education; *Rural Education; Rural Schools; Shared Resources and Services; Teacher Morale; Teacher Shortage; Teaching Conditions

IDENTIFIERS *Cluster Schools; *Ethiopia

ABSTRACT

In 1994 Ethiopia committed to expanding its education system, particularly at the primary level, to reach previously marginalized communities. The unprecedented expansion of the education system resulted in large classes with few resources. The reforms aimed to implement student-centered, active learning, but the new approach was not reflected in the teacher preparation curriculum, and there was little student teaching. As a result, there was a teacher shortage and morale was low. A new site-based system of inservice teacher development was introduced in 1997. Training center schools received special training and other inputs in order to function as local training centers for other schools in their geographic area. Staff development programs took place at regular intervals, mostly at the school level. They were practical and based on the concerns and needs of primary teachers, and they involved primary teachers themselves as facilitators. The new model faced considerable opposition at first. The program was tried out on a limited basis in Tigrai Region. Teachers reported that the cluster school-based training was important and relevant to their everyday activities in the classroom. Teachers also responded positively to the participatory, group activity-based methodologies of the workshops and to the regular contact with their colleagues that the cluster organization provided. Because of its contribution to teacher skills and morale, the program was adopted as national policy. (Contains 26 references.) (TD)

Preparing More and Better Teachers: A New Vision of Teacher Development in Ethiopia

Maekelech Gidey
BESO Project[1] Tigrai Region

Presented at the Comparative International Education Society Conference (CIES) held in Orlando, Florida on March 6-9, 2002.

Introduction

This paper describes a site-based inservice teacher development program in Tigrai Region of Ethiopia. The program has been developed by the Tigrai Education Bureau and the BESO Project and responds to recent educational reforms including the decentralization of authority to the regions, a new primary education curriculum, and policies that have encouraged dramatic increases in school enrollment leading to an extreme shortage of teachers and deterioration of educational quality. The paper traces the development of site-based inservice capacity building programs for teachers that were opposed when first introduced, but are now adopted as regional and national policy. The paper will also describe a new vision of teacher development in Ethiopia.

Starting from one of the lowest levels of educational participation in the world in 1991, under 20% gross enrollment rate, the new Transitional Government of Ethiopia made the rapid expansion of education and the attainment of universal primary education by the year 2015 one of its top priorities. In Ethiopia about 90% of the people live in rural areas, many of which are extremely remote. There had been virtually no education for children in these areas where the populations were marginalized by poverty and lack of almost all social services.

The new government introduced a comprehensive educational reform initiative in 1994 in the context of decentralized authority to newly created regions. The Ethiopian government places great emphasis on the role of education in the process of social and economic development and as a way of bringing marginalized people into the mainstream.

Many governments see education as indispensable in terms of attaining peace, freedom and social justice. Education has a fundamental role to play in personal and social development. While education is an ongoing process of improving knowledge and skills, it is also a means of bringing about personal development and positive relationships among individuals, groups and nations and reducing power and wealth disparities both within and among countries. Education is a strong instrument for economic and social development. It is a principal means to foster a deeper and more harmonious form of human development and, thereby, to reduce poverty, exclusion, ignorance, oppression, war or conflicts. Although education alone is not a miracle cure or a magic formula opening the door to a world in which all ideals will be attained, a government needs a sound policy for education and the means to implement it.

[1] The BESO Project (1995-2002) is funded by USAID/Ethiopia and is administered by a consortium led by the Academy for Educational Development.

The opening statement of the 1994 Education and Training Policy of Ethiopia reads: "Education is a process by which man *(sic)* transmits his experiences, new findings, and values accumulated over the years, in his struggle for survival and development through generations." (TGE 1994, p.1) In Ethiopia, there is the political will and increased resources to support national education reform programs. There is a growing conviction that education is a critical strategic investment for national development. There is also a growing belief that good educational programs must emerge from an engaged community and from the active participation of teachers; good education cannot be effectively directed only by plans and resources from the top. There is a growing awareness of the critical role of teachers' abilities, motivation and morale in improving educational quality.

This paper describes and assesses the experiences of Ethiopia in the implementation of its policy to improve quality, equity, access, relevance and efficiency of basic education through a program to improve teacher quality. The paper focuses on the site-based cluster inservice teacher education program in Tigrai Region initiated by the Tigrai Education Bureau and the BESO Project.

Background

The Ethiopian education system had many problems when the present government took power in 1991. The gross enrollment ratio was under 20% overall and under 10% for girls. The quality of education was poor, there were great regional disparities and the curriculum was not responsive to the needs of the learners and the country's diverse communities.

Responding to these challenges, the Transitional Government of Ethiopia in 1994 prepared the New Education and Training Policy (NETP), which still forms the foundation of school development in the country. The main goal of the policy is to expand the education system in order to reach previously marginalized communities and to make education more relevant to the learners and to the development needs of the country. The major objectives of the policy are enhancing the quality of education, particularly at the primary level, by improving the conditions of the school environment, upgrading teacher quality, developing new curricula, and constructing schools.

Extensive decentralization of authority to 11 newly created regions in all sectors took place soon after 1991. This included decentralizing the management of education to the newly created regions, developing primary school curriculum appropriate to each region, home languages being used as the medium of instruction, and new approaches to teaching and learning such as active learning, creative thinking, and problem solving in student-centered classrooms.

Education is expanding rapidly and now reaches many communities previously marginalized. Primary school enrollment rose from 4,468,294 pupils in 1996/97 to 7,401,473 in 2000/2001, with an average annual growth of 13.4%. (MOE 2001)

The gross enrolment ratio at primary level shows that access has been improved for both boys and girls.

Table: Gross Enrolment Ratio (grades 1-8)

Year	Boys	Girls	Total
1996/1997	43.0	26.0	34.7
1997/1998	52.0	31.2	41.8
1998/1999	55.9	35.3	45.8
1999/2000	60.9	40.7	51.0
2000/2001	67.3	47.0	57.4

Source: *Annual Education Statistics*, MOE 2001.

The above table shows that the GER increased from about 43% to about 67% for boys and from about 26% to 47% for girls in the last five years, although the gender gap stubbornly remains at about 20%.

Many African states share the problems of improving the quality and equity of education while trying to ensure greater access. (Nieuwenhis 1997) This is the situation in Ethiopia with the introduction of free primary education and the achievement of universal primary education identified as a top priority. Despite the overall rapid expansion of primary education and increased enrollment, girls remain underrepresented due to cultural, financial and social factors, although there is a large disparity among the regions in terms of girls' participation. Education is expanding rapidly, even more rapidly than that the government had planned, and is now reaching many previously underserved children. Yet with this expansion of enrolment quality has suffered.

The unprecedented expansion of the education system has made heavy demands on all aspects of the system including education administration and management, education facilities and, particularly, on teachers. There are not enough teachers in the system in either primary or secondary education. The supply and quality of teachers are the most important quality factor in the education system. Even when a more relevant curriculum is developed, school outcomes and students' performance depend to a great extent on the availability of sufficient teachers and their energy, motivation, and talent.

The newly trained teachers often are assigned to the most rural or remote areas, where they suffer from lack of housing, transportation, and where schools are especially lacking in resources. Many teachers are not willing to go to their assignments in remote areas and instead go to urban areas to seek alternative employment or further education in areas other than education. This represents a great wastage for the system. A high level of teacher attrition, therefore, is also contributing to the shortage of teachers. Also, private schools are being to develop, which also draw teachers away from public schools. Teacher attrition through HIV AIDS has also increased in the past few years.

The regions have had no choice by to increase class sizes and, therefore, the student-ratio, a factor that negatively affects quality. Teachers are often assigned to teach in large classes with more than 75 children and virtually no resources. Not surprisingly, this is beyond their capacity. In addition, good teachers are taken from the first cycle primary (grades 1-4) to the second cycle (grades 5-8) and from the second cycle to secondary schools, thus leaving the least qualified teachers in the first cycle. This situation has had an adverse effect on the quality of teaching and on teachers' morale.

Teachers must be offered special support and incentives to enhance their professionalism and encourage them to persist in circumstances like these. Professionalism in teacher education was already a matter of concern and attention in the 1994 NETP. Even though a new career structure has been instituted to enhance the motivation and professional attitudes of teachers, low teacher morale has had a negative effect implementing the NETP policies. Developing programs to increase teacher professionalism and commitment to their work through preservice and inservice teacher development programs is an important way of trying to solve the problems of low morale, motivation, and inadequate skills.

According to the NETP and subsequent policy decisions, activity-oriented and problem-solving approaches, as well as subject integration for the first cycle, form the basis of the new primary curriculum. Efforts have been made to design the curriculum and prepare instructional materials based on the constructivist foundations of the policy, but this approach has not until recently been reflected in the teacher preparation curriculum. Although a new methodology-based curriculum is presently being introduced to the Teacher Training Institutes (TTIs), until recently preservice teacher preparation has been based almost entirely on subject matter. There has also been a mismatch between the linear TTI curriculum and the integrated primary curriculum, and little reference to the primary school textbooks and teachers guides. In addition, there has been limited practice teaching, so the trainees have little opportunity to see the real world of the school and teaching. Generally, teachers have not been prepared to implement the new primary curriculum during their initial training. In addition, teachers are not specifically prepared to teach in large overcrowded classes and, as a result, they think student-centered learning cannot be practiced in the typical classrooms of Ethiopia. They don't understand that, although it is certainly more difficult in large classes, student-centered learning is possible and should be tried. These factors make the shift from rote learning to active learning extremely difficult. But one thing is certain. If teachers do not understand the new curriculum, if they are not prepared to implement active learning, if they are not prepared for the present conditions of Ethiopian schools, if they are not supported by strong inservice programs, if their morale and dedication to their profession is not strong, and if they are not prepared to be caring and humane when interacting with their students, the new reforms will not be implemented successfully and neither the children nor Ethiopian society will be adequately served by the education in which the country places such hope.

Selected Literature

The sweeping educational reforms in Ethiopia initiated in 1994 include a new paradigm of teaching and learning, the implementation of an integrated curriculum in the lower grades, the development of new strategies of teaching and learning based on active learning and student-centered approaches, new approaches to classroom management, and restructuring of the schools. Basically the reforms require a shift from a positivist approach to knowledge, teaching and learning to a constructivist approach. All of these innovations to improve educational quality will come to nothing if the key role of teachers is not taken into consideration. It is what teachers think, believe and do in classrooms that ultimately will shape the successful learning of pupils. Teachers' competence and performance, in turn, are based on the twin factors of the quality of preservice and inservice teacher education programs, which provide the basis of professional capacity, and their general morale and dedication, growing out of the immediate conditions of their work.

The literature of the last few decades strongly documents the key importance of teachers in the accomplishment of educational quality in both developing and industrialized countries. Ongoing inservice professional development programs for teachers are identified as central to teacher effectiveness, quality and morale. The most effective programs are identified as well-organized and supported school-based professional development programs. Adequate time and resources are required for effective teacher development and it is important that teachers have a say in the content of activities. The skills and ideas learned in training activities should be practiced immediately in the classroom and followed up with sessions in which teachers can share ideas and work collaboratively to discuss the implementation of new ideas. (Blum 1990; Farrell 1989; Levine 1991; Lockheed and Verspoor 1991).

Central to the notion of a good quality teacher is a professional who is prepared to make decisions about his or her classroom practice based on the knowledge of a range of alternatives. This approach "reflective practice" assumes that teachers are, or can become, professionals equipped to tailor their practice to the needs of specific situations of the school, the class, and the individual students. The sense of professionalism and empowerment that this fosters is a major factor in improving teacher morale. Teachers are no longer treated as unthinking puppets that are expected to follow a set formula in their teaching regardless of the circumstances. They are regarded as professionals fully capable of making a range of professional decisions and are equipped through their preservice and inservice teacher education programs with the theoretical and practical knowledge required to function in this manner. (Schon 1983) This approach becomes even more necessary in the implementation of the active learning goals of the new curriculum in Ethiopia.

It is important that improvements at the school level be integrated and comprehensive. Hopkins (1986) argues for an approach to school improvement and inservice that embodies a whole school improvement focus. In this model inservice training and needs identification should not be discrete activities but linked together within a whole school improvement strategy. Whole school improvement is defined as a systematic, sustained effort aimed at changes in learning conditions and other related internal conditions in schools, often working together in groups. (Van Velzen et al. 1985).

Central to site-based programs is the notion that top-down policy change in organizations like schools are rarely successful, or are successful only if implemented when teachers and school leaders take ownership of the change. (McLaughlin et al. 1978) According to the site or school-based management movement, it is clear that efforts to change school practice must begin in schools. (Smith and Piele 1997) Schools themselves or groups of schools, rather than provinces, states or larger administrative entities, have been shown to be the best units for encouraging significant change. (Lockheed 1991; Hargraves and Hopkins 1991).

Comparisons of a variety of staff development models for teachers document the efficacy of a localized approach incorporating classroom support over the more traditional "one- shot" workshop approach. (Joyce and Showers 1980) Much of the work on school effectiveness points to ongoing staff development as an essential element in sustained school improvement. (Stoll in Fullan and Hargreaves 1992; Wideen in Fullan and Hargreaves 1992) Staff development activities that meet perceived local needs and engender and develop a collaborative and collegial relationship among teachers have been shown to lead to more sustained improvement in teaching practice. Within this model, teachers take the opportunity to engage in professional exchange and build mutual support groups that provide an environment for sustaining innovation.

The school-based approach to inservice teacher education is totally different in both form and content from the traditional large-scale cascade model inservice workshops that have proved to be ineffective. Hopkins (1986) described school-focused inservice as an attempt on the part of teachers, with external support, to direct professional and development efforts towards the identified needs of the school with the major goal of improving the quality of life within the classroom. Hopkins (1986) has emphasized that models of inservice training should be based on needs identification that relate to the ongoing processes at the school level, that integrate teacher and school development, and fit into the specific rhythm of the school. In the current educational climate that is staggering under the weight of a change of educational models, rapid expansion and overcrowding, it is important for communities of teachers in schools to search for strategies that link together the substance of innovations, provide a vehicle for their delivery, and address them directly the culture of the school.

As researchers have studied the characteristics of schools with a healthy teaching and learning climate, the concept of the head teacher as instructional leader has emerged. The role of the school leader is pivotal in the process of improving learning opportunities for students and sustaining changes in teacher behavior. (Smith and Piele 1997) The school leader as both an efficient manager and a spiritual educator with the skills to facilitate effective local reform is a key factor in the process. (Stoll in Fullan and Hargreaves 1992) A key factor in school leadership is encouraging the success of females as teachers and in leadership positions within the school. The role model of females in positions of authority has an important impact on both boys and girls and has been shown to be important in increasing girls' enrolment and sustaining girls' participation through to the end of primary school. (Chamie 1983; Lockheed 1991)

There is a consensus among practitioners that effective professional development programs are those that work directly with teachers to make a difference in the quality of teaching and to improve classroom practice. Andrews et al. (1990) compiled opinions from nineteen professionals from eleven countries and concluded that effective teacher professional development programs, particularly for those teachers with either very weak or no teacher preparation, tend to have the following characteristics:

- Needs assessment conducted to determine the needs, interests, strengths, weaknesses, and training gaps. The information obtained through the needs assessment would be the basis to identify the kind of training needed. This is important to determine the goals, content, best delivery method and evaluation of the activities.
- Careful planning in the wider context. Effective programs are well planned and tend to be formal in nature. An overall strategic framework for accomplishing long-term goals, which considers how various needs might be met, is necessary. The programs also need to be structured to reduce anxiety and fear of change, incorporating activities that have proved to be successful existing practice (Ryan 1993).
- Participatory planning and implementation. Many research findings (Tatto 1997; Mosenthal and Ball 1992) indicate that the most effective and relevant inservice programs are those that allow high levels of local participation in both design and implementation. A review of ninety-seven studies on inservice education indicates that those programs that involved participant teachers in the planning of the activities tended to have greater successes in accomplishing their objectives than those without the assistance of the participants (Lawrence 1974).

- Applicable curriculum content and methods. A good inservice program needs to give a balance of pedagogy and subject matter as opposed to exclusive emphasis on one or the other. It should also include practical methods to teach subject matter, child development and learning theories, evaluation of teaching and learning, ways to strengthen parent-school-community relations through participatory teaching strategies such as discussions, simulations and teaching practice.
- Ongoing guidance, monitoring and support. Ongoing support is essential for an effective transfer of skills. Programs that focus on continuous development to guide, monitor and support necessary skills, knowledge and new ideas tend to be more successful in bringing about changes at the classroom level than those that seek quick fixes to fill in deficiencies or those that simply provide a qualification.

Therefore, the models that have proved most successful in teachers' professional development are based on ongoing, school-based, career-long support, with content determined largely by teachers' own identified needs and initiatives from the school level. Programs closely tied to the realities of the classroom, incorporating ongoing mentoring and support, can be especially effective, particularly in education systems like Ethiopia's where there is a great shortage of teachers with adequate basic preparation and where reforms are being introduced in curriculum and instruction for which more experienced teachers are totally unprepared.

Many of the above ideas have been incorporated in the inservice teacher development program that has been developed over the last five years in Tigrai Region of Ethiopia. From our experience in Tigrai, organizing schools into clusters with each cluster comprising one training center school and providing those schools with some materials and very limited funds (for tea breaks, lunches and instructional materials) to facilitate the cluster school-based training activities, has proved a successful approach. The whole staff, working together in schools or in clusters of schools in a cooperative and participatory manner, is learning together and from each other. This program encourages teachers to value and use the professional knowledge they gain in inservice training. As a result, they are more likely to see themselves as being in control of the training and, increasingly, in control of their own practice. With the support of the regional bureau, with courses provided periodically to cluster trainers and with materials to guide the site-based training, teachers are now playing a major part in planning and delivery of the program, as well as being the beneficiaries of the professional development. Improvement of classroom instruction is the essential focus of inservice program and it will prove successful or not according to the improvement in the quality of teaching and learning in the schools and teachers' ability to structure active and student-centered learning.

Preservice and Inservice Teacher Education Programs in Ethiopia

Teacher education in Ethiopia is made up of preservice and inservice programs. Preservice teacher education is comprised of two levels aimed at the preparation of teachers for the first cycle (grades 1-4) and second cycle (grades 5-8) of the primary education. Teachers for the first cycle of primary education are prepared to certificate level in the teacher training institutes (TTIs), soon to become institutes of teacher education, for one academic year. Students enter after completing grade 12 (in the old system) and grade 10 (in the new system started in 2001/2002). Teachers for the second cycle primary education receive preservice teacher education in colleges of teacher education (CTEs) for two years to diploma level after completing grade 12 secondary school education. The diploma course is scheduled to change in the 2003/2004 academic year from a two-year to a one-

year diploma program. Both programs in future will emphasize methodology over subject matter, the reverse of the pattern in the past.

Inservice teacher development has several programs. One program upgrades teachers at teacher training institutes or colleges to certificate or diploma level, usually during the summer vacation and in the evening. Research findings indicate that inservice upgrading of teachers' qualifications in this way does not improve student academic achievement. Wolff et al. (1994) concluded that inservice training shows generally inadequate results, particularly when those programs are designed to provide teachers with another degree or higher pay. Such training programs often do not provide adequate linkages and ongoing support with classroom practice.

Another program, the one traditionally used in Ethiopia, is a large, centralized one-time mass training workshop. This cascade model of inservice training is widely documented to have little positive effect on teachers' classroom practice. Afghan et al. (1997) identified the following reasons for the ineffectiveness of this approach:

- Lack of transfer of new knowledge or methods to classroom practice due to the one-shot limited nature of intervention,
- Curricula and training materials often developed in isolation from the needs of teachers,
- Lack of well-qualified trainers to give good quality and meaningful training,
- Logistics and delivery problems consumed most of the time because of the size of the inservice program, leaving little time for good quality activities that might have an impact,
- High cost of this model requiring teachers to spend a lot of time away from their posts, requiring payment for transportation, daily allowances and accommodation,
- The high cost made it difficult to institutionalize and sustain inservice training over the long-term.

A third kind of inservice teacher education, which has different objectives from the upgrading type or the large centralized workshops type, is usually known as ongoing professional development of teachers. Some call it school-based or site-based professional development. Others call it continuous and ongoing staff development. And others still, combining the two, calling it site-based ongoing professional development of teachers.

Considering the limitations of the first two models, a new site-based system of inservice teacher development was introduced in Ethiopia in 1997. In this model staff development programs take place at regular intervals mostly at the school level, they are practical and based on the concerns and needs of primary teachers, they involve primary teachers themselves as facilitators, and are much more cost effective. A system of inservice teacher development based on these ideas is much more likely to improve quality and lead to sustainable programs of teacher improvement.

This new model faced considerable opposition at first and was not initially accepted. The cascade model was fixed in the minds of educators as the best training model. Mass workshops were popular because it gave the participants a chance to travel, collect per diems, and meet a large number of colleagues. A primary objection was the belief that teachers were not capable of conducting their own training in school or cluster groups, even with good support and training materials from regional bureaus; training could only be done by "experts" delivering information.

After much discussion and negotiation, the school-based program was finally tried out on a limited basis in Tigrai Region where the Tigrai Education Bureau and the BESO Project have developed the program together since 1997. The program proved to be very popular with teachers and the Bureau soon organized all schools in the region into clusters through which site-based teacher development programs would be organized. A similar program has been initiated in the Southern Nations and Nationalities People's Region (SNNP) with the BESO Project. Two other projects have worked in other regions to initiate similar programs that were other alternatives to the cascade model.
In 2000 the model of site-based inservice teacher development in clusters of schools was adopted as national policy and is now being implemented on a pilot basis in all regions.

The Integrated Inservice Teacher Development and School Leadership Program in Tigrai Region

Background of the program

Although Tigrai Region is one of the first areas in the country where modern education was introduced early in the 20th century, the region was the most affected during the 17 years of armed struggle against the Derge regime between 1974 and 1991. As a result, during the last three years of the war (1988-1991) there was almost no education in the region. In addition, the region is regularly affected by cycles of drought, which hinders education and development.

Considering these constraints, the 1991-2002 increase in enrolment from close to 0% to 75% shows dramatic growth. The border war with Eritrea from 1998-2000 affected Tigrai in particular because it lies on the border with Eritrea. Schools and classrooms near the border were destroyed and hundreds of thousands of people displaced. This caused a drop in enrolment and high dropout rates in some areas during the war, certainly preventing additional potential growth. The war also resulted in lower budgets for education for a few years, thus having a negative impact on quality, not only in Tigrai but also throughout the country.

Despite the strong financial and policy commitment to education by the federal and regional governments, there are still some problems with access and quality in the region as well as in the whole country:

- Inadequate provision and distribution of schools in the rural areas, forcing pupils to travel long distances, which prevents a large percentage of children who reach enrolment age (six or seven years) from enrolling.
- Lack of sufficient schools and classrooms in urban areas, which has led to many large classes with well over 75 students and a 1 to 75 teacher-student ratio or more.
- Poor furnishing of classes forcing children to sit on floor, attend school in the open air classes made of grass or leaves (*dass classes*), and sometimes just sitting under a tree in the school compound exposed to wind, sun, and rain.
- Inadequate textbooks and instructional materials, in both quality and quantity, that affects quality of teaching learning.
- Despite of the growth in enrolment, low performance of girls in the schools.

- Lack of qualified teachers. As indicated in the Education Statistics for 2000/2001 among 8,210 primary (grades 1-8) teachers in the region, only about 65.5% are qualified for the level at which they teach.
- Demoralized teachers as a result of difficult working conditions.

It is widely recognized in the region that good teaching is one of the most important factors in improving the quality of education. There is now a strong commitment to strengthen the role and performance of teachers. Preservice and inservice teacher education, therefore, take on enormous importance. They are considered as two parts of a whole system, preservice teacher education providing the foundation for good teaching and inservice teacher education ensuring professional development throughout the span of teachers' years of service. There is one teacher training institution (TTI) and one teacher training college (CTE) in the region. The first prepares qualified teachers for the first cycle (grades 1-4) and the other prepares teachers for the second cycle (grades 5-8) to a diploma level.

Considering the shortage of trained teachers at both levels of primary education particularly at the second cycle, where only about 28% of the teaching force is qualified, the college has a special one-year diploma program to upgrade teachers in grades 1-4 to diploma level to teach in the second cycle. In addition, the TTI has started an inservice extension program this year and enrolled an extra 550 students in order to meet the demand for additional teachers.

The other part of teachers' development, the inservice teacher training program, has followed two training delivery approaches. Before the beginning of the innovative school- based programs, the large-scale cascade or multiplier model of teachers' inservice training was used. The cascade training method features centrally organized training-of-trainers workshops, which are supposed to be followed by a series of training workshops at zone (county), woreda (sub-county or school district), and at the school-level. This model has the advantage of reaching a large number of participants relatively quickly, but with the disadvantages of diffusion of content accuracy and intensity as the training moves through the levels, the lack of opportunity to meet local needs, and little or no follow-up and support at the school and classroom level. This model can be useful under certain limited circumstances, but cannot sustain the quantity and quality of ongoing professional development that all teachers need throughout their teaching careers. The great majority of teachers in this system have had no inservice support whatsoever.

Development of the program

Two regions in the country (Tigrai and SNNP) in collaboration with the BESO Project started site-based professional development pilot programs five years ago. Three major objectives of the pilot program were improved instructional leadership skills for head teachers, localized teachers' professional development leading to school improvement, and increased female participation in school leadership roles.

In this program, the role of the school leader is considered as pivotal in the process of improving learning opportunities for students and sustaining changes in teacher behavior. It also recognizes the fact that top-down policy changes in organizations like schools can be successfully implemented only when teachers and school leaders take ownership of the changes introduced by the school-based management. The major feature of the initial school leadership program was a series of short workshops for primary school directors and senior teachers on some of the skills

needed for effective supervision. During that first year of the school leadership program, 1996/97, over 1,000 school directors and senior teachers in the region participated in at least four days of training and practiced the skills and strategies associated with school improvement and instructional leadership.

Towards the end of the first year, it became clear that a different training approach was needed in order to insure sustainability and institutionalization of the program. Accordingly, it was decided to move away from a cascade training-of-trainers model to a more localized, ongoing, supported system of professional development. This is a radical change from the cascade one-shot workshops to a site-based ongoing system of professional support that will reach all teachers with frequent training.
As mentioned above, this new model faced considerable opposition at first and was not accepted for quite a long time.
The school-based program was finally tried out on a limited basis in Tigrai Region. The Tigrai Education Bureau and the BESO Project started the program together in 1997. After the program proved to be popular, the Bureau organized all schools in the region into clusters through which site-based teacher development programs would be implemented. At the same time, a pilot program was initiated in SNNP.

The pilot project was designed in a way that could be assessed, adjusted and replicated to serve the region as a whole. The pilot included a "training-center school" in each cluster that receives special training and other inputs in order to function as an outreach center to other schools in its cluster. Eventually, the cluster center schools serve as local training centers for site-based school improvement programs in their geographic areas. Clusters of schools were chosen for training, mutual support and guidance. They were able to identify common needs and participate in creating appropriate inservice staff development programs to meet their needs.

The major purposes of the cluster program were the following:

- Assist teachers in understanding and effectively implementing the new curriculum
- Encourage experience sharing of teachers from different schools and facilitate a process of collegiality in order to reduce teachers' isolation, particularly in the rural areas
- Develop a cooperative and participatory attitude among teachers for the overall development of the schools, acquiring the experiences about various school problems and solutions
- Provide a forum for the professional development of teachers and enhance their professional and social status
- Develop teachers' inbuilt supervision skills and problem solving skills in teaching, administration, and instructional leadership
- Make efficient use of scarce material and human resources

The strategy for implementation of the program included creating awareness in different levels of the education system. Workshops were held to familiarize the zone, woreda and Regional Education Bureau officers with the program, which included training on how to supervise and support site-based professional development.

The first cluster training center schools were selected based up on the following criteria, some of which are no longer being used as the program has expanded across the region:

- Accessible to all-weather roads (easy to reach or visit)
- A complete primary, i.e. grades 1-8
- Common workspace available such as a classroom with extra storage or a pedagogical center
- Within reasonable distance of at least three other primary schools (not more than one and a half hours' walking distance), and within reasonable distance of woreda (sub-county or school district) and zone (county) education offices
- Experienced director with some training
- A mixture of young and experienced teachers willing to work together
- Active school committee

After selection of the cluster centers, practical training on school-based data collection was given to woreda officers. The participants were sent back to their respective woredas to conduct the baseline data collection in the selected schools. The baseline data provided the immediate training and material needs for the cluster school-based training activities.

Starting from the 1996-97 academic year, different programs have been developed to improve the instructional leadership skills of school directors and senior teachers. Training programs have been also implemented for woreda and zone officers in supervision and other skills that are required to play an active role to strengthen the cluster-training program. Understanding of the new curriculum, its purposes, subject matter and methodologies, has been an important part of this program.

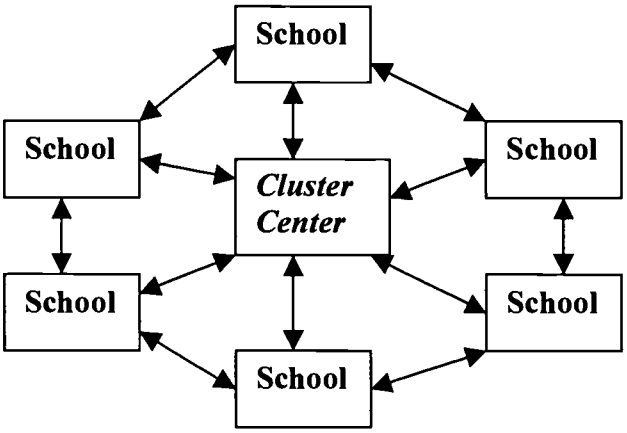
During the 1997-98 academic year the REB organized all the schools of Tigrai into 170 clusters. In the 2000-2001 academic year, based on the revised clustering of schools, there are 218 clusters in the region, through which they implement a variety of school-based and participatory programs. One of the important programs is the cluster school-based inservice training for teachers that has been assisted by BESO and functioned on a pilot basis for three years, from 1997 to 2000. The program has now developed from a pilot activity to a regular program. The model that has evolved over the last four years has proved to be promising for providing appropriate and participatory inservice teacher development at the school level throughout the region.

Almost all primary schools in the region, 889, are grouped geographically into 218 clusters of between 3 and 8 schools each. Seven schools in the far Western Zone are so extremely isolated that they are not clustered. In urban areas the number of schools in a cluster can be up to 8, but in the rural areas it can be as few as 3 schools in each cluster.

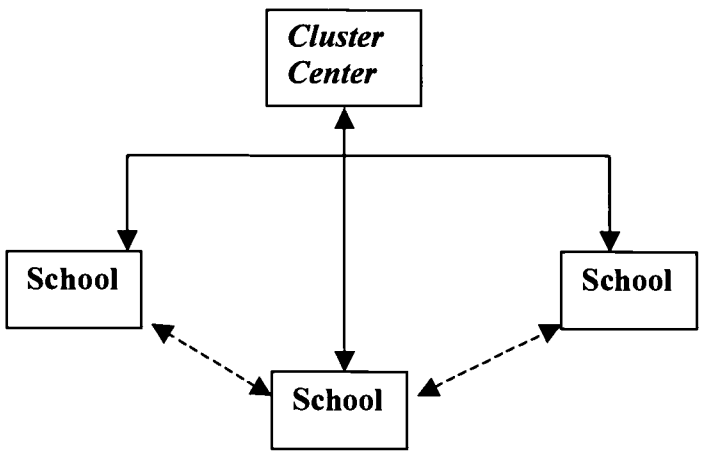
Organizational structure of the program

There are several different patterns of clustering (location map) of schools. Two examples are as follows:

1. School cluster forming a circle: This type of clustering is used when the schools geographically surrounded the center. In this form, schools not only develop a relationship with the center, but also carry out curricular and co-curricular activities among themselves.



2. Schools at different distance from the center school: In this model, schools are geographically dispersed and cannot or rarely can make an interrelationship among themselves but only with the center.



The first formation is widely used in the region, but the second formation is also used in a few cases where the cluster center is chosen, not because it is the geographical center of the schools clustered to it, but because it may be in better condition (adequate educational equipment, facilities and staff enthusiasm) to apply professional development in their school.

The selection of the center school, sometimes called a Cluster Resource Center (CRC), has three benefits. First, the school can serve as a focal point for training, with teachers traveling a shorter distance than to the woreda center to receive training, thus reducing time wasted in travel and reducing the cost of training since per diem is not paid. Second, the CRC is usually better endowed with equipment and facilities and, thus, has resources to share with the satellite schools. Third, the CRC can serve as an administrative focal point for woreda/district education offices to communicate with and receive messages from satellite schools.

Changes in the model and organization of the program

There have been two different models of training delivery in the cluster-training program: First, trainers went from the REB and the BESO Project directly to the training-center schools to give training. This training model was important at the beginning of the program (1997-98 academic year) to introduce the major concept of site-based professional and school improvement strategies for all teachers, school directors and woreda officers. In addition, this model is particularly important to give the school clusters some basic ideas and practices of organizing effective training at the school level. The topics in these training sessions included activities that gave participants the opportunity to practice skills in initiating school improvement activities and practice small-group learning techniques including the use of higher-order thinking skills.

The second training approach used a modified training-of-trainers approach. TOT participants from the cluster schools and woreda education offices were given the responsibility to serve as training facilitators for the cluster training-center schools and took part in extensive preparation covering subject matter and teaching approaches at workshops in the regional capital. The final activity for each training-of-trainers session is to discuss the next steps at the school level. During the second year of the cluster program (1998-99) when the pilot program was extended to an additional 16 cluster schools, making a total of 35 clusters, both training models took place simultaneously until June 2000.

During 2000-2001, the cluster model developed from a pilot to a regular program and was extended to 120 cluster-center schools in 19 woredas (approximately 500 schools are clustered to these 120 cluster-center schools). The expansion of the program through the summer and semester break training-of-trainers program is the key feature of the new model. Two representatives from each cluster plus one woreda officer attended the training-of-trainers workshop in order to prepare for facilitating workshops within their clusters. The model of the training has also changed in that the woredas and the clusters are now fully responsible for organizing their own training. The zones and woredas organize follow-up activities and supervision in the clusters. They offer strong support on organizational matters and also on content and instructional issues.

With the new model, the trainers from the REB and BESO are much less directly involved in the delivery of inservice training at the school level than they were formerly, although they continue to have a strong supervisory role. Other developments have taken place related to the new model including the fact that schools now have more control over their training. Also Coordinating Committees consisting of all head teachers in the cluster have been set up in all of the school clusters. Perhaps most important, all teachers from a school participate in the cluster training program. Sometimes the number of teachers participating is selected according to the training topics. For example, the aesthetics training was not given for all teachers in the cluster, but only for the teachers who are teaching music and art in the lower grades.

Selection of topics for school-based workshops

Teachers are involved in the identification and selection of training topics. Because of the emphasis on staff identifying their own needs, and the close links between those needs and both curriculum implementation and school organization, there has been a shift towards a more

democratic, participatory management style, giving the staff a sense of ownership over their own professional development.

In order to determine the training needs for teachers and school directors, interviews were conducted, a needs assessment questionnaire was developed, and school visits and classroom observations were made starting in the first year of the program. A needs analysis was carried out and topics were selected and prioritized based on selected criteria. After that, instructional materials developers were selected to develop the materials based on the selected topics. REB officers, woreda and zone education officers, TTI and College instructors, professionals from other bureaus, heads of school pedagogical centers directors, and teachers are involved as material developers and trainers in the program. Finally the materials are printed, used in the different levels of training and distributed to the schools for ongoing professional development.

The cluster school-based training, therefore, focuses on topics derived from needs assessments and concentrates on giving teachers the methodological skills to teach more effectively according to the goals of the new curriculum. Emphasis is placed on problem-solving and active-learning approaches and the use of higher-order thinking skills. Some of the topics that have been covered in the school-based cluster training and the leadership training are the following:

- Changing paradigms in education
- Concepts and purposes of the new curriculum
- Relationship between the new curriculum and changing classroom methods
- Instructional planning
- Action research
- Assessment techniques and continuous assessment
- Helping girls succeed in school
- The nature of effective schools
- Principles and practices of teacher appraisal
- Approaches to supervision
- Females in the education profession
- Preparation and use of instructional aids
- Management styles and instructional leadership
- Use of different participatory training methodologies
- Implementation of the new career structure for teachers
- Strengthening the school clusters
- Learner centered methodologies
- Classroom management
- Team work for teachers for school improvement
- Teaching methodologies of music and art in lower grades,
- Teaching methodologies of mathematics English and environmental science,
- Finance and materials management in schools
- Personnel management
- Conflict management
- Educational administration
- Record keeping in schools

- Teaching environmental science (integrated natural and social science, health and crafts in grades 1-4)

Typical workshop sessions

Each session in the cluster-training program involves teachers engaged in different activities for the purposes of learning. The methodological approach for all sessions is learner-centered, participatory and group-activity based with lots of opportunities for participants to practice the innovative teaching techniques and to discuss ways to implement them in their classrooms. Task-oriented groups are commonly used in the training and they are never passive. There are also viewing groups, listening groups, role-playing groups, manipulating groups, planning groups, analyzing groups, and deciding groups. Nearly every event associated with the inservice education through the cluster schools is a group activity. We use different methods like brainstorming; buzz sessions, discussions and role-playing to work with these different groups for training in different topics. Well-organized group activities stimulate higher-level cognitive learning outcomes. Sometimes the groups are organized based on activities and methods appropriate for specific subjects such as preparation of written tests and evaluation of prepared tests in their schools, and preparation of instructional aids for specific units in the textbooks they are going to use in their classes.

Teachers record their results from the group activities. In some cases, these are put on chart paper for discussion and group report presentation. In other cases, teachers present their group activity by playing the roles that have been given. The way they present after a group activity in the session depends on the specific activity given and methods used.

We found that a very important approach was when teachers took the role of a student and were given activities from the textbooks. For example, in one of the sessions teachers were given the following activities from the grade 3 environmental science textbook to do in groups:

- Observe your school compound. Collect 6 fresh and 6 dry leaves you found, make a collage using your leaves; see the differences and similarities between the leaves by smell, size, shape and color. Give the name of the tree you took the leaves from and present to the class.
- Collect different fruits in your school compound. Compare your fruit by size, shape and color. Which one of the fruits you like more, why? Convince your classmates about your preference. Sing a song about your fruits.
- Collect two groups of stones with 8 stones in each group; show the difference in color and shape. Estimate the weight of each stone and make a chart to show the weight of the stones in each group. Develop 5 questions using your stones and present to the class.

Teachers showed a great interest in activities in which they put themselves in the situation of a child and used the surrounding environment as a laboratory for learning. In this situation they are able to see how children can be active participants of the lesson, how the nature of the activities can encourage different levels of thinking, and how children could be encouraged to use their talents in their activities, learn from each other and help each other. In addition, they were able to see and practice how to plan integrated curriculum lessons that incorporate higher-order thinking skills and learner-centered methods.

In the tea breaks and during lunch there was much discussion and useful ideas were exchanged. This is an important part of the training in the cluster schools training program.

Experience-sharing activities

The educational workshops or training sessions are the formal aspect of teacher development. The sharing of experience and ideas between peers and colleagues is the informal aspect. This informal interaction among schools is one of the most significant benefits of school clustering. The guidelines for discussion are developed and discussed by the woreda officers. The woreda officers select the schools to host the discussions based on performance of the schools. Experiences of each cluster are presented in the experience sharing workshops. Most of the school clusters are working on the following activities:

- Educational or training workshops or sessions
- Experience sharing
- Supervision
- Academic and sport competitions
- Preparation of model exam for specific grade levels
- Curriculum evaluation
- Cooperative/administrative work (cooperation by sharing personnel, equipment and learning materials)

These activities are important to teacher professional development and have significant impact on student and staff morale as well as contributing to the whole school development. In addition, the experience sharing forums were very important for improving the cluster program. Teachers strongly recommended that a document be prepared to help guide the training and other professional development activities in the school clusters. As a result of these constructive comments and important suggestions from teachers, the cluster guide was developed in 2000/2001. During the current academic year, clusters have built formal experience-sharing activities at regular intervals into their annual plans. These experience-sharing activities are organized for all teachers in the cluster and for cluster level committees such as curriculum committees, exam committees and sport committees.

Out of the experience sharing meetings, we have gained a greater understanding of the productive approaches to teacher professional development and school improvement.

Cluster coordination

An important element for the efficient functioning of the cluster is a strong, representative coordinating committee. Every cluster has its own coordinating committee comprised of all head teachers in the cluster. Usually the coordinating committees meet monthly. They discuss improvements and evaluate the different aspects of professional development activities through the cluster program.

A cluster guide was developed last year that includes responsibilities of all levels of the system and the cluster coordinating committee. The functions of the coordinating committee include: (i) planning cluster activities; (ii) identifying specific training needs; (iii) identifying mechanisms to promote community participation; (iv) identifying mechanisms to promote girls' participation; (v)

discussing administrative issues; and (vi) developing strategies to improve the functioning of the clusters and the professional development of teachers.

Lack of a clear structure and assignment of responsibilities within the REB for the cluster program in particular and for the inservice program in general, and lack of qualified personnel at the woreda level education offices have been the main problems for effective implementation and sustainability of the program in the past few years. Now there is a major commitment from the REB and a new organizational structure including a responsible Division under the new Capacity Building Department in the Regional Education Bureau and at the woreda level specifically responsible for inservice staff development and the cluster program.

Impact of the program

Throughout the development of the program, there has been a monitoring mechanism and impact evaluation exercise. Efforts have been made to monitor the degree to which the training and experience-sharing activities have resulted in changes in teacher behavior and in more effective instructional leadership on the part of the directors and other members of the school leadership team. Evidence was collected in several ways: interviews with teachers, directors and supervisors; reports from zone and woreda officers; and school visits including classroom observations and interviews with facilitators.

In many of the cluster schools the following indicators of improved quality of schooling have been observed. This represents a significant and growing change, although we cannot say that the changes emphasized in the program are being uniformly applied

- Student participation in classroom learning activities has increased.
- Teacher attitudes have changed from teacher-centered to learner-centered.
- Teachers cope better with their teaching conditions. The uncertainty and fear to try the new methodologies/learner-centered approaches decreased and students are able to cope with the new approach.
- Teachers teach effectively and have become sensitive to the needs of their students, how they learn, and the classroom dynamics.
- Teachers are forming teams to develop content-integrated lessons.
- Instructional materials/teaching aids made of locally available materials as well as new charts from the schools' mini-pedagogical centers are being used widely.
- School directors have understood their role as instructional leaders and they are initiating improvement activities.
- Teachers are playing an active part in the problem-solving process through experience sharing in their clusters.
- Communication and sharing of ideas among teachers in the cluster and participating schools through working together to integrate activities to their classrooms have increased. Experienced teachers are able to share their skills and knowledge with young teachers and collaboration between teachers has been strengthened.
- Woreda officers/supervisors are supportive of the process and are involved as trainers, observers, and evaluators in the program; this strengthens the relationship between the supervisors and teachers by focusing on professional development.

- Participation of female teachers who were too shy to participate in the first training sessions has increased and now they are not only participating but also facilitating their own training sessions.

Many teachers view the new cluster approach positively because of their active participation and ownership. What is valued most highly is the opportunity to share ideas and experiences with other teachers, and to observe them in their classrooms. Some teachers seem to find good professional satisfaction through participation in the activities offered under the cluster school-based training program. They reported that the cluster school-based training is important and relevant to their day-to-day activities in the classroom and has helped them to solve some of the problems of teaching in their schools. The teachers said that a cluster school-based training program that helps them to meet and help each other in solving their problems and sharing their experiences is a good idea. They also responded positively to the participatory, group activity-based methodologies of the workshops.

The training was perceived as useful for improving teaching skills. The majority of head teachers and teachers reported that they tried to identify teaching-learning problems and to implement the training in the classroom. However, this was difficult because of a shortage of classrooms, teaching materials, facilities, and teachers, plus large class size with more than 75 children. Teachers respond positively to the kind of regular professional contact that their colleagues provide through a cluster organization. Because of its contribution to teachers' skills and morale, and because it has become an important vehicle for information and activity flow to and from the woredas and REBs, the cluster is a promising framework for advancing site-based school activities.

Challenges encountered in the cluster model of professional development

While both education officers and teachers in the region appreciate the site-based cluster model for teacher professional development programs, there are still some constraints that have not been resolved:

- Logistics: Teachers are invited to the cluster/resource center school from nearby schools (satellite schools) that are relatively distant and the walk is difficult. No per diem is paid. Only lunch is provided during the training period. Hence, individual teachers may incur personal costs when they have to stay over night.
- Certification: Teachers usually ask what tangible benefit they would get after receiving the training, other than increased teaching skills. Many participating teachers are of the opinion that such ongoing professional development should be linked to their future career development within the established policy framework.
- Capacity of woreda officers: Although different programs have been developed to improve the ability of woreda officers to organize and support activities in the school clusters, the lack of qualified officers has not yet been solved. The new organizational structure of the system now seems to be responding to this, so that there will be qualified officers at the woreda level.
- Budget allocation: Although some schools are allocating part of their internal revenue to support cluster activities, the Regional Education Bureau has not until very recently allocated budgets for professional development activities in the clusters. This was probably an artifact of the "project effect" since BESO Project funds had covered the costs of the activities, giving the bureau little incentive to allocate very scarce funds for this program. Provision of matching contributions to the cluster budget for professional development activities has been

recommended by a USAID-sponsored study 2001 as the best incentive to encourage the financial participation of schools.

Some keys to the success of the program

- Federal and regional policies support the shift from the previous cascade model to the school-based cluster approach.
- Awareness creation and capacity building through different workshops organized for education officers and other relevant bodies have achieved coordinated efforts at all levels of the education system.
- Good cooperation between the Tigrai Education Bureau and the BESO Project in the region has been essential to the success of the program.
- Careful training-needs assessment and consultations with teachers in building up the program.
- A strong training material development for continuous professional development programs in the schools.
- Successful pilot programs before expansion and through a limited expansion year by year, we were able to identify many problems in the design of the clusters themselves.
- Teacher ownership of the program. Continuous needs assessment at the school level, continuous focus group discussions with teachers and school directors about the development of the program, involvement of teachers at all levels and eventually administration of the program by teachers through the cluster coordinating committees all contribute to the teacher ownership of the program.

A New Vision of Teacher Development

There is still an enormous amount of energy, goodwill, creativity and dedication evident everywhere. But teachers need some new means of sustaining their personal and professional growth. Teacher morale and attrition have been identified as serious problems in recent years. Many things must be done to address these problems, but there is much potential through the cluster in-service training program for meeting many of the professional needs of teachers, increasing their professional identity, and helping to enhance their confidence in themselves and their status and morale.

Expansion of the school-based inservice program

The cluster model has now been developed from a pilot to a regular program in the region. From our experience, reaching all cluster training-center schools from the regional capital is unworkable and unjustifiable in relation to the program's sustainability. Therefore, the new model of training in which the woreda education offices and the cluster schools are responsible for organizing their own training and follow-up activities in the clusters with support from the Tigrai Regional Education Bureau and the BESO Project is important for both expansion and sustainability of the program.

These activities have provided a strong model for the design and implementation of school-based cluster inservice teacher development. In the near future, cluster programs will be implemented in most of the regions of the country. Although each region will adopt or develop the kind of cluster most suitable for its circumstances, the model provided by the Tigrai Regional Education Bureau in school-based professional development activities and cluster programs will be very important in

demonstrating feasible and productive alternatives. This expansion should be supported with the use of additional instructional materials and programs aimed at the whole school development.

The practical implementation of active learning, a student-centered approach in the classroom is much more difficult than making the basic concepts understood. Extensive use of practical examples of active learning in real Ethiopian school conditions will be necessary as a step toward effective implementation of active learning. However, it will be impossible to make significant progress in active learning approaches until the examination system starts testing active learning and ceases testing memorization only.

Developing a vision of integrated teacher development

Based on what we have learned from our practice and from the experiences of other countries, we envision a professional continuum, starting with strong preservice programs emphasizing methodology and active learning, while ensuring that teachers have a good grasp of subject matter. Preservice is only the first step on the continuum. Programs of intensive school-based professional development should be designed that flow from the preservice programs and continue to receive strong support from the TTIs and CTEs. It is suggested that an inservice/school linkage committee be formed within each TTI and CTE that will have the responsibility of instructional participation in inservice and primary school programs including the cluster program. We envisage the number of intersecting learning communities at the school level, relating schools to woredas, and relating schools and woredas to preservice teacher education that will form an integrated continuum of teacher development.

Developing integrated programs to support females

Problems of gender imbalance will not be solved simply through the development of good policies or through expressions of good intentions. Although good policies are necessary, strong and acceptable programs to promote gender equity in all areas of education should be developed through dialogue and made systematic so that implementation will make progress.

In the first year of the new cluster-training program there were almost no female directors, vice directors and department heads, and no female officers in zone or woreda education offices. As a result of much attention to this problem, there are now some female directors, vice directors and more female department heads in the schools, but still almost no female woreda, zone or bureau officers. The school-based inservice training model gives us the opportunity to develop and sustain leadership teams, which include female teachers, who can eventually move into leadership roles. This effort should be strengthened through a variety of different programs integrated into the school-based professional development.

Strategies such as a program of mentoring relationships between established or stronger female teachers and younger or more vulnerable teachers will be an important element of the professional development of teachers. Clusters should each develop a female teacher mentoring plan and a girls' advisory committee. Materials' development for mentoring should be included in the training materials provided to the clusters and teachers should be included in their development. Assertiveness training programs should be part of the mentoring program and will be offered at the cluster level for female teachers and female teachers in turn can take some of the principles they

learn and use them to encourage the culturally appropriate confident behavior of girl students in their schools and to support the activities of the girls' advisory committees.

Conclusions

A coordinated effort at all levels of the education system from the region to the schools is essential for the program's sustainability and expansion. Close collaboration is important to ensure effective planning and cluster school-based training. It is essential to concentrate staff resources to serve the special and continuing training needs of teachers. One way of ensuring this concentration is organizing training workshops for education officers and other relevant bodies who are expected to give necessary support to the program.

From our close contact with teachers over the last five years is support of the school-based inservice training programs, plus evaluations of the training, we have learned that the following points should be also considered to strengthen the program. Inservice training can be related directly to curriculum change, implementation, and to curriculum evaluation at the school level. Training should become a continuing process, integrated with the job, rather than something additional that happens away from the job; inservice training can be a collaborative undertaking, with an emphasis on learning together and sharing experiences. In addition, attendance of individuals at courses or workshops outside the school can be planned to enhance the school cluster-based inservice training program.

Mechanisms must be built into the program from the beginning so that teachers develop initially a growing sense of ownership of the program and, eventually, take real ownership of the program. Any top-down or imposed program will be less successful than one that is built on the capacities, needs and visions of the teachers. Continuous needs assessments at the school level, continuous focus group discussions with teachers and school directors about the development of the program, involvement of teachers at all levels and eventually administration of the program by teachers all contribute to teacher ownership of the program. A program in which teachers feel this ownership is the best way to build teachers' capacity, increase their professionalism and enable their confidence to grow. All of these contribute to the greatly needed enhancement of teachers' general professionalism, status and morale. The other key to the success of school-based professional development programs is the leadership of the schools; directors and senior teachers must become committed and effective instructional leaders, not just administrators in the more traditional way.

Teachers respond positively to the kind of regular professional contact with their colleagues provided through a cluster organization. Because of its contribution to teachers' skills and morale, and because it has become an important vehicle for information and activity flow to and from the woredas and REBs, the cluster is a promising framework, with modifications, for advancing site-based school activities.

Developing a strong vision of integrated teacher development that will be a career-long learning process is essential for building the quality of education in Ethiopia because, without strong teachers, the education system will certainly stagnate and not reach its ambitious goals of quality education for all. We can argue that, as a result of the school-based cluster inservice teacher development program in Tigrai, education is now reaching the marginalized or previously unserved or underserved communities with education that is starting to improve in quality, despite the

challenges of rapid expansion. There is now better teaching, teaching in which teachers are more aware of students' individual capacities and differences; there is more support for teachers who teach large and overcrowded classes; and there is better understanding of the purposes and implementation of active learning approaches in the classroom. This means that the large number of children in the region who are now attending school (an enrollment rate increase from nearly 0% to 75% in a ten-year period), those who were previously not served, excluded or marginalized in the system, are now receiving gradually improving quality of education in the classroom. The site-based cluster inservice teacher development has contributed significantly to this improvement and has the best potential for supporting the continued improvement of teachers' classroom practice and morale.

Bibliography

Afghan, Z., F. Akbar, F. Jaffri, B. Baud, H. Graybill and E. Graybill (1997). "A Decentralized and Need-based Approach to Teacher Training and Support in Balochistan: The Primary Teacher Mentoring Program", paper presented at the National Education Conference on Improving Schools, Karachi, Pakistan.

Andrews J., I. E. Housego and D. Thomas (1990). " Effective Inservice Programs in Developing Countries: A Study of Experts' Opinions", in *Teachers and Teaching in the Developing World,* New York: Garland.

Blum, Robert E. (1990). *Effective Schooling Practices: A Research Synthesis,* Portland, Oregon: Northwest Regional Laboratory.

Chamie, M. (1983). *National Institutional and Household Factors Affecting Young Girls' School Attendance in Developing Societies,* Washington, D.C.: USAID/ International Center for Research on Women and Office of Human Resources.

Farrell, Joseph P. (1989). "International Lessons for School Effectiveness: The View from the Developing World", in *Educational Policy for Effective Schools,* Toronto: OISE Press.

Federal Democratic Republic of Ethiopia, Education Management Information Systems (2001). *Education Statistics, Annual Abstract 2000-2001,* Addis Ababa: Ministry of Education.

Fullan, M. and Hargreaves, A. (1992). *Teacher Development and Education Change,* London: Falmer Press.

Craig, J. Helen, et al. (1998). *Teacher Development: Making an Impact,* Washington, D.C.: USAID, ABEL Project.

Hargreaves, A. and D. Hopkins (1991). *The Empowered School: The Management and Practice of Development Planning,* London: Cassell Education Limited.

Hopkins, D. (1986). *Inservice Training and Educational Development,* London: Croom Helen.

Joyce, B. and B. Showers (1980). "Improving Inservice Training: the Message of Research ", in *Educational Leadership,* 37(5): 379-85.

Leu, Elizabeth (1999). "The New Curriculum: Issues of Theory and Practice", *A Resource Package for Teacher Educators and Curriculum Developers,* Mekelle: Tigrai Education Bureau and BESO Project.

Levine, Daniel U. (1991). "Creating Effective Schools: Findings and Implications from Research and Practice", *Phi Delta Kappan, 72 (5): 389-93.*

Lockheed, M.E. and A.M. Verspoor (1991). *Improving Primary Education in Developing*

Countries, Oxford: Published for World Bank by Oxford University Press.

Maekelech Gidey (2001). "Implementation of Cluster School-Based Inservice Program in Tigrai Region of Ethiopia", paper presented at the National Workshop on Cluster Schools, Nazareth.

McLaughlin, M. and D. Marsh (1978). "Staff Development and School Change", *Teachers' College Record,* 80, 1: 69-94

Mosenthal, J. and D. Ball (1992). "Constructing New Forms of Subject Matter Instruction: Subject Matter Knowledge in Inservice Teacher Education", *Journal of Teacher Education,* 43 (5): 347-56.

Nieuwenhis, F.J. (1997). "Can Research into Development of Education in Post Colonial Africa Shape Educational Policies in South Africa?" *International Journal of Educational Development,* 17(2): 129-143.

Rodd, Alastair, Aster Mihiretu and Desta W/Mariam (2001). *Review of School Clustering In Ethiopia: A Strategy to Improve Teacher Professional Development and Enhance School Effectiveness,* Addis Ababa: USAID/CRI.

Schon, Donald (1983). *The Reflective Practitioner,* New York: Basic Books.

Smith, S. and P. Piele (1997). *School Leadership Handbook for Excellence,* ERIC Clearinghouse on Educational Management.

Transitional Government of Ethiopia (1994). *Education and Training Policy,* Addis Ababa: Ministry of Education.

Transitional Government of Ethiopia (1994). *Education Sector Strategy,* Addis Ababa: Ministry of Education.

USAID (2000). *The Development of Primary Education in Ethiopia: Innovations and Lessons Learned,* Addis Ababa: USAID.

Van Velzen, W. et.al(1985). *Making School Improvement Work,* Leuven, Belgium: ACCO.

Wolff, L., E. Schiefelbein and J. Valanzuela (1994). *Improving the Quality of Primary Education in Latin America and the Caribbean: Toward the 21st Century,* Discussion Paper 257, Washington, D.C.: The World Bank.

Attention to Velma Mitchell

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

ERIC REPRODUCTION RELEASE

I. Document Identification:

Title: **Preparing More and Better Teachers: A New Vision of Teacher Development in Ethiopia**

Author: **Ms. Maekelech Gidey, BESO Project Tigrai Region**

Corporate Source:

Publication Date: **Presented at the Comparative International Education Society Conference held in Orlando, Florida on March 6-9, 2002.**

II. Reproduction Release:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please check one of the following three options and sign the release form.

✓Ok Level 1 - Permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g. electronic) and paper copy.

____ Level 2A - Permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only.

____ Level 2B - Permitting reproduction and dissemination in microfiche only.

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but no option is marked, documents will be processed at Level 1.

Sign Here: "I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature: _____ Position: **Instructional Materials development Specialist**

Printed Name: **MAEKELECH GIDEY** Organization: **AED/BESO Project**

Address: **Ministry of Education, P.O. Box 13157, Addis Ababa, Ethiopia**

Telephone No: **251-1-550874; 251-1-557108; Fax: 251-1-552754**

Date: **October 21, 2002**

III. Document Availability Information (from Non-ERIC Source):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price per copy: Quantity price:

IV. Referral of ERIC to Copyright/Reproduction Rights Holder:

If the right to grant this reproduction release is held by someone other than the addressee, please complete the following:

Name:

Address:

V. Attach this form to the document being submitted and send both to:

Velma Mitchell, Acquisitions Coordinator
ERIC Clearinghouse on Rural Education and Small Schools
P.O. Box 1348
1031 Quarrier Street
Charleston, WV 25325-1348

Phone and electronic mail numbers:

800-624-9120 (Clearinghouse toll-free number)
304-347-0467 (Clearinghouse FAX number)
mitchelv@ael.org