Country: Ethiopia
Project Name: Basic Education System Overhaul (BESO)
Funding Organization: USAID
Implementing Partners in BESO: Academy for Educational Development (AED), American Institutes for Research (AIR), Research Triangle Institutes (RTI)
Duration: BESO I (1995-2002); BESO II (2002-2007)

Overall project	The goals of the Basic Education System Overhaul (BESO) Project were to strengthen quality and access in basic education through system-wide reform, including reform of curriculum and instruction as well as strengthening of decentralized management.
Program described	The program described in this matrix is the school- and cluster-based teacher professional development program developed by regional states in Ethiopia with support of the USAID-funded BESO project. The main focus of this description is the program that was developed in Tigrai Regional State between 1995 and 2002.
Objectives of the teacher professional development component	The objectives of the teacher professional development component of BESO were to support teacher capacity to teach effectively according to the new active-learning-based curriculum that was introduced in 1994, using appropriate new student-centered and problem-solving approaches. The program, based on provision of localized ongoing teacher professional development support, formed clusters of schools and a program of teacher learning that took place in the clusters. The program helped teachers improve their subject-matter knowledge based on the content of the new curriculum (including integrated content in grades 1-4) and the new teaching approaches that required teachers to engage students in the development of higher-order thinking skills as opposed to the rote memory learning of the old curriculum. Another important goal of the program was to help teachers develop more positive attitudes, more cooperative approaches to their work at the school level, and strengthen professional identity. As a result of the program teachers were to know a range of active learning classroom approaches in various subject areas that were appropriate to the new curriculum. Teachers were also introduced to the idea of reflective practice and action research through which they studied their practice to improve it. The objectives of the program also included reaching teachers with the new active-learning approach to teacher learning which posits that teachers (just as their students) will learn, develop skills, and practice them in their classrooms more effectively if they are actively involved in the learning process rather than being the passive receivers of information or exhortation (related to past models of teacher learning that did little to change practice). The objectives of the program were related to research findings about what motivates and improves quality of teaching. Research shows that teachers who know subject matter well and have a grasp of a range of appropriate teaching approaches are able to encourage better learning and a better quality classroom environment. Research also shows that increased access is related to better quality of education. In addition, student achievement is shown to improve when teaching approaches are better, as long as a range of enabling conditions are at least minimally present such as basic resources for teaching, good school leadership, and parental support.
Background and context	The ideas of the cluster program were introduced in 1995 by the BESO project. Initially, decentralized school- or cluster-based teacher professional development was not favored by either the Ministry or the regional state education bureaus because they had a long tradition of centralized, expert-driven teacher development programs and did not believe that teachers themselves could, with supporting materials, facilitate their own professional

	development. Through a year of discussions about the possibilities related to localized teacher development the two regions in which the project worked, Tigrai and Southern Nation, Nationalities, Peoples Region (SNNPR), agreed to try out cluster-based programs through small-scale pilot programs. Each region created its model differently, based on local needs and geography. Since the previous centralized "cascade" model of inservice teacher workshops had reached only a tiny fraction of teachers, and since there was no follow-up mechanism in place for the cascade to function (teachers who attend workshops return to their schools and organize ways of passing on their new information and skills), the cluster-based program that included all teachers in professional development activities was immediately popular with teachers. The regions agreed to expand the pilot in subsequent years. In Tigrai Regional State, the cluster-based model became regional policy in the third year and was gradually expanded to all schools by the fifth year of the program.
Organization of the program	The program in Tigrai State was extended to all schools in the region by 2002. Clusters of schools met approximately every six weeks, although this varied according to local conditions (distance between schools, nature of the terrain, transportation) and energy of the cluster members, teachers, and school heads. In some cases, groups of six or eight schools met together; in some cases, clusters were made up of only two or three schools. The clusters met for two-day sessions on Saturday/Sunday. The cluster meetings took place either at a cluster-center school (that was supplied with a minimum package of materials for workshop support) or rotated among the schools in a cluster. This was decided by the individual clusters. Teachers were not paid for attending the workshops, either *per diem* or transport, but they were provided with lunch on both days. The regional education bureau insisted on no payment for teachers because the bureau would not be able to pay for this when project support ended. Teachers complained about the lack of per diem but the cluster workshops remained highly popular despite this. Individual schools were encouraged to carry out short meetings based on using and reflecting on the content of the cluster workshops. Success was uneven, with some schools organizing weekly meetings of subject-matter groups or grade-level groups of teachers and other schools rarely organizing meetings. This depended heavily on the enthusiasm and vision of the school head. The clusters and cluster workshops were organized overall by the local (county) education offices and supervised by the regional state education bureau. Workshops were facilitated in the first year by project staff and by education bureau staff and in the second two years co-facilitated by teachers and project/education bureau staff who modeled participatory and active-learning facilitation. Gradually the facilitation was taken over entirely by the teachers who were supported by facilitation guides that were produced by the project and the education bureau. In the third year of the program in Tigrai region, "training-of-trainers" sessions took place during the summer school break which prepared skilled teachers from each cluster in subject-specific workshop facilitation.
Program content/ Support materials	The program content is based on assessment of needs carried out among teachers, combined with the needs of the "new curriculum," a reformed curriculum introduced in 1995 emphasizing active learning, student-centered teaching, problem-solving skills, local relevance and teaching and learning in local languages. In the first year, the topics were somewhat *ad hoc*, but as the program developed the content became more systematic. Support materials to assist with cluster-workshop facilitation (and to guide subsequent school-based meetings teacher follow-up activities) were written by project staff, education bureau staff, teacher educators, and excellent primary teachers who were experienced in

	active learning methods. Workshops were carried out with writers to ensure that the materials were interactive and not based on lecturing to the teachers. In each cluster meeting the teachers focused on one or two new ideas or skills that they saw modeled, which they discussed, practiced, and role-played. They then made a commitment to try one or two new approaches in their schools over the next few weeks before returning to the next cluster meeting. In some schools, regular or weekly meetings were held to discuss and reflect on implementation of these approaches. In each cluster workshop, there was discussion and reflection on the implementation of the skills introduced at the previous workshop. Action research and reflection were used throughout the program at the cluster and school levels to analyze and improve practice.
Costs	The program was financed between 1995 and 2002 by the BESO project, sponsored by USAID, with staff time contributed by the bureau. The project paid for the development of materials to support the program, *per diem* and travel of education bureau staff to support the program at the school level, minimal materials to support cluster workshops (paper, markers, etc.), and teachers' lunches and tea breaks. The education bureau insisted that costs be kept as low as possible to ensure sustainability of the program. The initial idea of a teacher assigned from every cluster to support cluster activities on a full- or part-time basis was not allowed by the education bureau because it was expensive and not sustainable. The clusters each had a cluster-center school that was supplied with materials for supporting the workshops paid for by the project. Comparison between the costs and benefits of the centralized "cascade" model that reaches only a few teachers and the decentralized school- or cluster-based model that includes all teachers is difficult and has not been done, although there is no doubt that a program that reaches all teachers such as the cluster model will be more expensive. Per-teacher unit costs will be very low in the cluster model as opposed to the cascade model, but since the cluster model includes all teachers, overall costs will be higher. Any cost-benefit analysis of programs will have to examine very carefully the benefits, which, without follow-up mechanisms, are minimal with cascade models.
Indicators/ Results	In yearly classroom observations, as well as teacher self-reporting, changes in attitudes and teacher practice were identified as a result of participation in the cluster-based professional development program. Teachers used active learning approaches more frequently and used a variety of classroom approaches. School observation and teachers reporting also identified better school-level collaboration among teachers and better morale, particularly in schools that implemented active school-level action research and reflection programs. Student engagement in lessons has also been observed and reported to be livelier. A limited program of locally administered student assessment indicated that there was improved learning in schools where the cluster is most active, but these results are preliminary. There was no attempt to compare student scores on national examinations (which take place at grade eight) in cluster and non-cluster schools. Now that the program is well established, the teachers and regional education bureau staff should develop the indicators of success that they want to achieve and measure them.