

Egyptian Ministry of Education Division of OCS

LearnLink Egypt

**THE LEARNLINK EGYPT GIRLS' EDUCATION
TRAINING PROJECT**

Final Report

January 2001

Prepared by the Academy for Educational Development

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**The United States Agency For International Development (USAID)
Contract No. HNE —1-96-000 18 T.O # 800
Implemented by the Academy for Educational Development (AED) Global
Communications and Learning Systems Project (LearnLink)**

ACKNOWLEDGMENTS

Many organizations provided invaluable support in helping the Academy for Educational Development (AED) successfully complete the LearnLink Egypt Project. First and foremost, we would like to thank His Excellency the Minister of Education, Dr. Hussein Kamel Bahaa El-Din, for authorizing and supporting the mandates of this USAID Task Order. In addition, we would like to acknowledge the contribution of Engineer Ragab Sharaby, the First Undersecretary for the Ministry of Education, whose cooperation allowed LearnLink to reach out and support the work of so many teachers and supervisors, and ultimately, the many girls who attend the One Classroom Schools. We are also indebted to the One Classroom School Division staff, especially the General Director, Mr. Samir Ibrahim, for his interest and motivation in improving the quality of learning in the OCS.

Special thanks to Ms. Linda Leonard from the AED Washington Office for her guidance and support, to Jeffrey Coupe and Amy Dickinson for their invaluable backstopping and attention to detail, and to all the LearnLink staff and trainers without whose help this project could not have been successfully completed:

Mrs. Iman Choucri, Financial Manager

Ms. Taisser Hossam El-Din, Assessment & Evaluation Coordinator

Dr. Abdel-Mohsen Selfo, Training Materials Specialist

Dr. Hussein El-Dreeny, Lead Training Consultant

Mrs. Sahar Au, Administrative Assistant

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Mr. Salah El-Awady Mohamed, Driver

Mr. Moustafa Shabaan, Office Support

Lastly, thanks to Dr. Dean Nielsen, the first LearnLink Chief of Party, who established the groundwork for project activities. And thanks to all the consultants and trainers who helped sustain project activities.

EXECUTIVE SUMMARY

The U.S. Agency for International Development (USAID) issued a contract to the Academy for Educational Development (AED) for the LearnLink Egypt Education Project on May 28, 1997. The LearnLink Project originally developed around three general goal areas that addressed the needs of Egyptian girls in small and rural schools:

curriculum development, teacher training and distance learning. The four-year project was part of USAID's Strategic Objective Two (S02) aimed at increasing girls' access to quality primary education in rural Egypt. By providing access to positive participatory multigrade learning environments, USAID hoped to increase girls' enrollment and retention rates. Project activities were four-fold:

1. Adapt the existing Egyptian curriculum for use in a multigrade or small-school settings.
2. Develop programs of both pre-service and in-service teacher training for these settings.
3. Create a program of English language instruction (Grades 4-5) through interactive radio that could be successfully delivered to small, multigrade schools in rural areas.
4. Conduct an assessment of a sample of small schools and formal government primary schools to serve as a baseline for measuring project results.

In June of 1999, changing priorities within the Egyptian Ministry of Education required USAID to issue a rescoping order to the Academy of Educational Development requesting the LearnLink Project redesign its work by eliminating curriculum development related activities. Therefore, the major part of LearnLink work would focus on teacher and supervisory training and infrastructure enhancement for the Mubarak OCS in the three designated governorates of Behaira, Beni-Suef, and Minia.

The rescoping order specified that LearnLink provide multigrade training to all teachers (approximately 1,000) and representative supervisors of the Mubarak One Classroom Schools in the three governorates of Behaira, Beni-Suef and Minia. Secondly, the process of implementation should go beyond one-shot delivery and seek instead to institutionalize a process of supervisor and teacher training and assessment within the Ministry of Education's One Classroom School's Division, and within the university faculties of education in the three target governorates.

The end-of-project outcomes included:

1. Completion of a Baseline Assessment Study of OCS in the three governorates;
2. Completion of a *Multigrade Teacher Training Resource Manual* that became the core document for training supervisors and teachers;
3. Completion of Prototype Supplemental Learning Aides;

4. Implementation of an assessment system for monitoring and evaluating children's performance; and
5. Design and implementation of a OCS Teacher and Supervisor Training Program that included a capacity development component for improving the MOE's infrastructure for delivering on-going staff development and support to the OCS.

Focusing on teacher training and infrastructure development helped assure the project had a significant impact on the actual application of instructional materials, multigrade classroom management, and student-oriented pedagogies. Ministry of Education teachers gained the necessary skills to create lessons and evaluate their teaching. Ministry supervisors changed to expand in-service training and the monitoring of classroom performance.

In response to USAID's request, AED-LearnLink's staff stressed three main characteristics in their plans: (1) a design which cycles trainers and teachers through a program of field based training, (2) strong support of classroom teachers by supervisors and peers who address issues collaboratively, and (3) a system for evaluating students, teachers, and supervisors as a means of identifying successful practices. LearnLink staff documented these practices as part of their evaluation and monitoring activities and incorporated results into training activities. Although geared mainly to rural one-classroom schools, the project generated valuable knowledge and resources with which to engage the education policy community to extend student-centered learning to other governorates and to Egypt's public classrooms.

An on-going process of monitoring and evaluation produced a valuable body of information on project implementation and outcomes. Through pre and post-training surveys, classroom observations of teacher practices, and case-study documentation, the LearnLink Project was able to demonstrate not only a high level of satisfaction from teachers and supervisors, but also significant changes in their behavior. Teaching moved from a teacher-centered learning environment to one characterized by active student participation. In a similar manner, supervisors moved away from authoritarian to more facilitative forms of supervision. In part, these changes resulted from a training design that simulated successful multigrade practices where teachers and supervisors were trained together through highly participatory and cooperative activities. This resulted in transference of these practices to the OCS and relationships between supervisors and teachers.

But what remains to be seen is the durability of these changes. In other words, how will they be maintained and sustained and for how long? This question represents a classic problem of externally funded projects. Concerned with this issue, LearnLink, USAID, and the MOE developed a plan to increase sustainability. However, because the activities in the plan were not within the LearnLink scope of work, U SAID and the MOE assumed responsibility for plan implementation.

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INTRODUCTION

The U.S. Agency for International Development (USAID) issued a contract to the Academy for Educational Development (AED) for the LearnLink Egypt Education Project on May 28, 1997. The LearnLink Project originally developed around three general goal areas that address the needs of Egyptian girls in small and rural schools:

curriculum development, teacher training and distance learning. The four-year project was part of USAID Strategic Objective Two (S02) aimed at increasing girls' access to quality primary education in rural Egypt. By providing access to positive participatory multigrade learning environments, USAID hoped to increase girls' enrollment and retention rates. Project activities were four-fold:

1. Adapt the existing Egyptian curriculum for use in a multigrade or small-school settings.
2. Develop programs of both pre-service and in-service teacher training for these settings.
3. Create a program of English language instruction (Grades 4-5) through interactive radio that could be successfully delivered to small, multigrade schools in rural areas.
4. Conduct an assessment of a sample of small schools and formal government primary schools to serve as a baseline for measuring project results.

A sister S02 project called ISIS was designed to augment the LearnLink Project by fostering support for girls' education at the village level and by launching community-supported small schools. ISIS activities included building schools and extensive pre- and in-service teacher training in the governorates of Behaira, Beni-Suef and Minia, as well as marginal areas of Cairo.

LearnLink began its work with its counterpart agency, the Center for Curriculum and Instructional Development (CCIMD), a unit within the Egyptian Ministry of Education (MOE). Working closely with CCIMD, LearnLink was to help develop multigrade curriculum materials for use in the Mubarak One Classroom Schools in the three governorates of Behaira, Beni-Suef, and Minia and other small multigrade schools, where appropriate. These materials were to be aligned with the existing scope and sequence of the MOE, but with adaptations and innovations that would emphasize student centered and active learning principles appropriate for a multigrade classroom.

A second phase of the work was to develop a training program for the newly developed curriculum materials that would include a component for field-testing and strategies designed around research-based effective multigrade practices in areas such as classroom organization and management, self-directed student learning, and student assessment. The training program would address needs of both teachers and supervisors. The project was expected to train approximately 1,000 teachers that would be needed once the ISIS activities were operational. However, because of changes in MOE priorities, the ISIS project was never funded. The termination of the ISIS project created a gap in USAID's S02, thus requiring a reassessment of the LearnLink Task Order. Moreover, differences between the LearnLink Task Order and CCIMD priorities

constrained implementation of the curriculum related components of LearnLink. These included activities one (curriculum adaptation) and three (interactive radio instruction). Taken together, USAID was faced with the necessity to modify its approach for addressing the shifting priorities within the MOE.

This report will provide the historical context and background for understanding the evolution and outcomes of the Project, with a major emphasis on the goals, implementation activities, and outcomes of the project after it was restructured in 1999.

Project Background and Scope of Work

In June of 1999, USAID issued a rescoping order to the Academy of Educational Development requesting the LearnLink Project redesign its work by eliminating curriculum development-related activities and focus entirely on teacher and supervisory training and infrastructure enhancement for the Mubarak OCS in the three designated governorates. Activities and products begun prior to the rescoping order were to be completed and/or modified and incorporated into the training activities.

The major features of USAID's request were:

- The transfer of the interactive radio instruction component to the Integrative English Language Project II (IELP-II);
- The withdrawal of LearnLink from activities related to curriculum development through the CCIMD counterpart;
- An intensive focus on trainer-of-trainers (TOT) and teacher training for multi-grade, one-classroom schools (OCS) in the governorates of Behaira, Beni-Suef and Minia;
- A small amount of follow-up to complete the unfinished work of the CCIMD supported by LearnLink in Years 1 and 2 of the project; and
- Completion of an assessment study of a sample of OCS in the three-targeted governorates.

USAID's request allowed LearnLink to move more effectively towards the goals of the original task order. Moreover, the focus on teacher training and infrastructure development allowed the project to have a greater impact on the actual application of instructional materials, multigrade classroom management, and student-oriented pedagogies in Egypt's one-classroom schools. Ministry of Education teachers gained the necessary skills to create lessons and evaluate their teaching. Ministry supervisors moved to expand in-service training and the monitoring of classroom performance.

In response to USAID's request, AED-LearnLink staff stressed three main characteristics in their plans: (1) a design which cycles trainers and teachers through a program of field based training,

(2) strong support of classroom teachers by supervisors and peers who address issues collaboratively, and (3) a system for evaluating students, teachers, and supervisors as a means of identifying successful practices. LearnLink staff documented these practices as part of their evaluation and monitoring activities and incorporated results into training activities and for use by the One-Classroom Schools Division of the Ministry of Education.

Although geared mainly to rural one-classroom schools, the project generated valuable knowledge and resources with which to engage the education policy community regarding the extension of student-centered learning to other governorates and to Egypt's public classrooms.

USAID Required Contract Changes

USAID's June 14, 1999 rescoping order specified the parameters for the rescoping and the end of project outcomes. The parameters specified that LearnLink would be shortened by six months to December 31, 2000 from the original end-of-contract date of May 2001. In addition, the following two parameters were included:

- **Target Population:** Provide multigrade training to all teachers (approximately 1,000) and representative supervisors of the Mubarak One-Classroom Schools in the three governorates of Behaira, Beni-Suef and Minia.
- **Institutionalization:** The process of implementation and the objectives thereof are to go beyond one-shot delivery and seek instead to institutionalize a process of supervisor and teacher training and assessment within the Ministry of Education's One Classroom School's Division, and within the university faculties of education in the three target governorates.

The end-of-project outcomes are described in outline form and are followed by a descriptive narrative for each outcome:

1. Completion of a Baseline Assessment Study of OCS in the three governorates;
2. Completion of a *Multigrade Teacher Training Resource Manual* that would become the core document for training supervisors and teachers;
3. Completion of Prototype Supplemental Learning Aides;
4. Implementation of an assessment system for monitoring and evaluating children's performance; and
5. Design and implementation of a OCS Teacher and Supervisor Training Program that includes a capacity development component for improving the MOE's infrastructure for delivering on-going staff development and support to the OCS.

Baseline Assessment Study

The Academy for Educational Development's (AED's) LearnLink Project collaborated with the MOE to conduct a study of One Classroom Schools (OCS) in the governorates of Behaira, Beni-

Suef, and Minia during the 1998-99 school year. Results of the study described school, teacher, and student characteristics, as well as common instructional practices, in a sample of multigrade schools located in these three governorates. Study findings enabled LearnLink and the MOE to design and implement training to teachers and supervisors in order to improve the quality of teaching in multigrade OCS in these three governorates.

This study represented the first systematic effort to examine the new OCS and provided baseline data on the status of school facilities and resources, student and teacher performance, and supervisory practices. It also provided a detailed description of current educational practices and outcomes in OCS.

Multigrade Teacher Training Resource Manual

LearnLink staff began editing and integrating final components of the *Multi grade teacher Training Resource Manual* into a formatted and cohesive document in October 1998 and, after extensive field-testing, delivered the completed copy at the end of Phase II training. Because the *Manual* served as the centerpiece document for training, field-testing was an integrated component of the teacher and supervisor training. The manual also included a model assessment tool that teachers used to measure student progress in the vitally important areas of self-direction and independence.

Prototype Supplemental Learning Aides

Dr. Jean Campbell worked with CCIMD staff and developed model-learning corners that served as prototype supplemental learning aids. Dr. Campbell's trip reports and photographs of the participation of CCIMD staff in workshops have demonstrated completion of these instructional aids. LearnLink Egypt met its obligations in this activity and, in concurrence with USAID, ended all work with CCIMD. As a result, LearnLink shifted its counterpart relationship to the MOE's Division of OCS. Further, models of these prototype learning aids were incorporated into best practices in the teacher training described below.

An Assessment System for Monitoring and Evaluating Children's Performance

The One-Classroom Schools (OCS) are unique in Egyptian education. They are multi-graded and only girls are allowed to attend. Girls enroll in the OCS in cohort groups that are mixed by age and they remain in these groups as they progress from grades one through five. Because any given grade can easily have girls performing at quite different levels, the MOE has decreed that students in the OCS may be accelerated beyond their initially assigned grade level under certain conditions. They must pass government tests and demonstrate their suitability to advance a grade. Moreover, under current policy, the advancement can only be made at the beginning of the school year.

The LearnLink Task Order required the development of an improved assessment system to assist OCS teachers in collecting the necessary achievement and proficiency data for making promotion decisions. Thus, the skills required of teachers to successfully conduct such an assessment were built into the teacher and supervisory training program. LearnLink created a

student assessment handbook for teachers that provided a conceptual framework, model observation and data collection tools, and a portfolio monitoring strategy (i.e., an assessment kit for each student) that assisted teachers in making sound decisions about student promotion. The materials LearnLink staff developed helped teachers and supervisors to observe and reflect on student performance in three areas important to student learning: attitudes toward learning, classroom behavior, and academic performance.

Teacher and Supervisor Training Program

The Teacher and Supervisor Training Program focused on improving multigrade instructional practices in a way that improved the MOE's capacity to incorporate best classroom practices and locally created instructional materials into their training activities. These materials exemplify an extremely important curricular application. In the multigrade setting instructional support materials provide a vehicle for engaging students in self-directed learning that helps free the teacher to work with those students and groups most in need. However, resource scarcity requires that teachers be trained to make and use instructional aids created from low-cost and readily available materials.

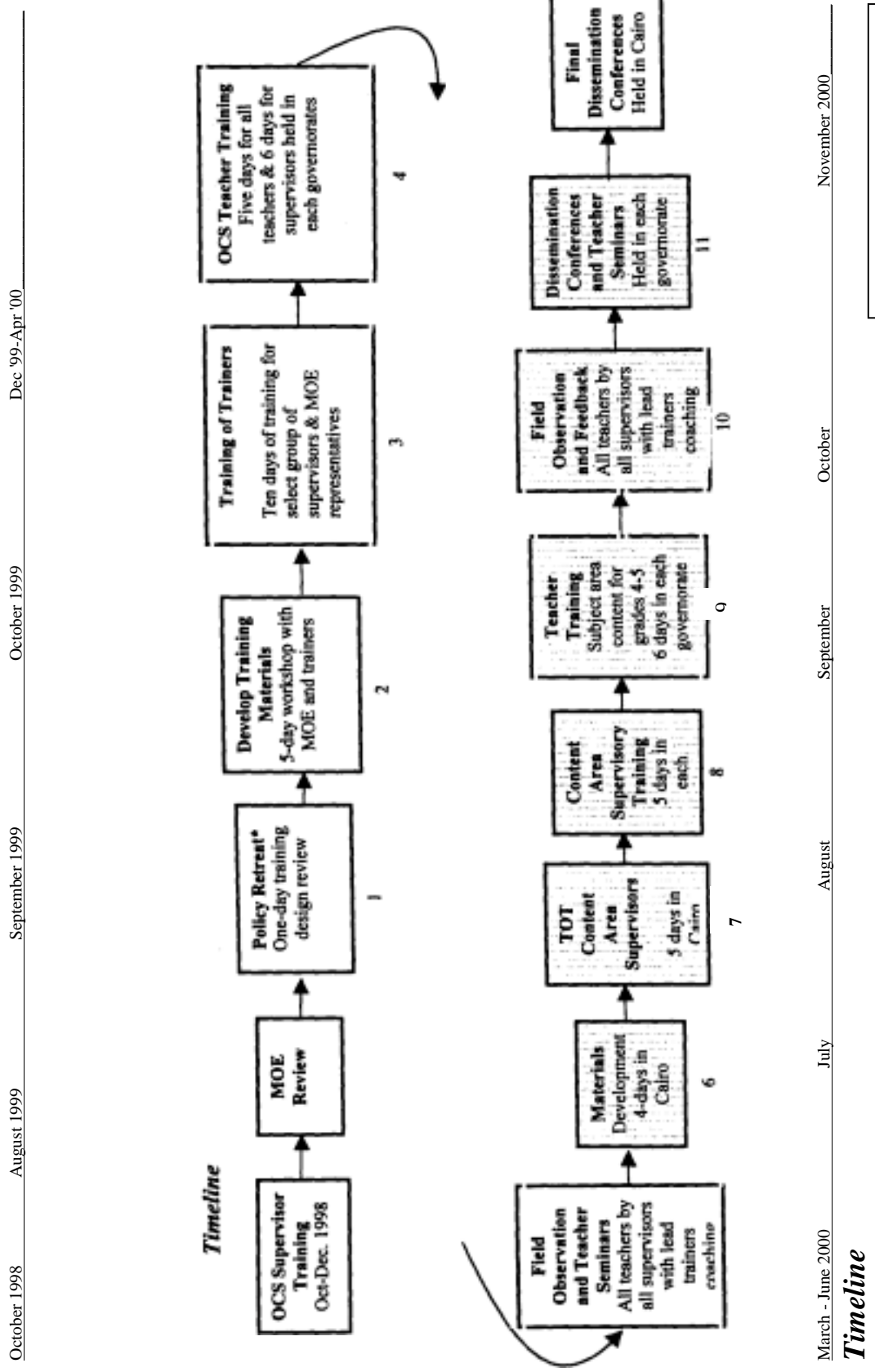
The Training Design

Figure 1 provides a schematic overview of the OCS training design, which was reviewed and revised in collaboration with the First Undersecretary of Education, Mr. Ragab Sharaby and an advisory board with representatives of key client groups from each governorate. The training design consisted of eleven discrete stages that took place between August 1999 and December 2000. Appendix I provides a narrative description of each stage.

Networking for Capacity Building

LearnLink organized opportunities for teachers, supervisors, policy makers, and client groups to come together and share experiences such as best practices, policy concerns and strategies. These opportunities are reflected in meetings of the Advisory Group, training activities, post-observation feedback groups, and end of project symposiums conducted in each governorate where multigrade best practices were shared. Lastly, a final policy conference was held in Cairo where best practices were presented and client groups developed action plans for sustaining training and support activities implemented through the LearnLink Project.

Figure 1: LearnLink Training Design for the MOE OCS in Three Governorates



Phase I (boxes 1-4)
Phase II (boxes 5-11)

Institutionalization Plan for In-Service Training and Staff Development

The LearnLink Project worked within the context of an Advisory Board under the direction of First Undersecretary, Mr. Ragab Sharaby. The Advisory Board offered suggestions during the implementation of the training program and helped ensure that the training design was both achievable and replicable in the future.

In general, the institutionalization plan consists of a training cycle and other concurrent processes designed to strengthen the institutional capacity of the One Classroom School Division within the Ministry of Education. While striving to link local with national capacity, the plan extended the linkages of the school to the community through training, and sought to extend the Ministry's connection to local faculties of education. The main components of the institutionalization plan were:

- A renewable cycle of training (see Figure 2)
- Teacher Clusters of Regional Peer Groups within each Governorate (Figure 1, stages 5, 10, and II)
- Concurrent programs for improving teaching quality (e.g., DTII)
- Teacher participation in documenting best practices (Figure 1, on-going at each stage and showcased at stages 11 and 12)

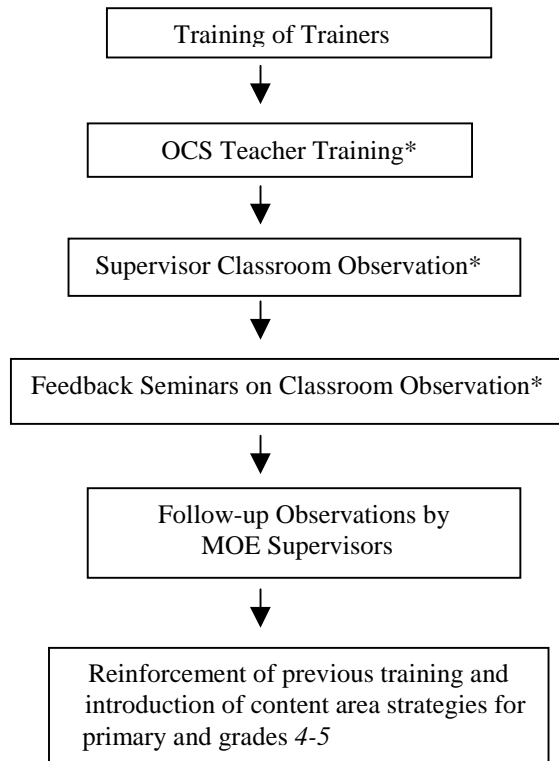
DTII and Project Collaboration

A group of supervisors, ministry officials and academics from the teaching colleges were trained in the U.S. through the Developmental Training II Project funded by U.S. Agency for International Development and administered by the International Institute of Education. This activity proved to be one of the best examples of inter-project collaboration that LearnLink engaged in. Through the U.S.-based training activity, participants were exposed to multigrade education in the U.S., and upon their return, built linkages and networks of support designed to improve the quality of teaching and teacher training. LearnLink made the most of these opportunities within the tight time constraints imposed by the rescoping in order to support the institutionalization effort.

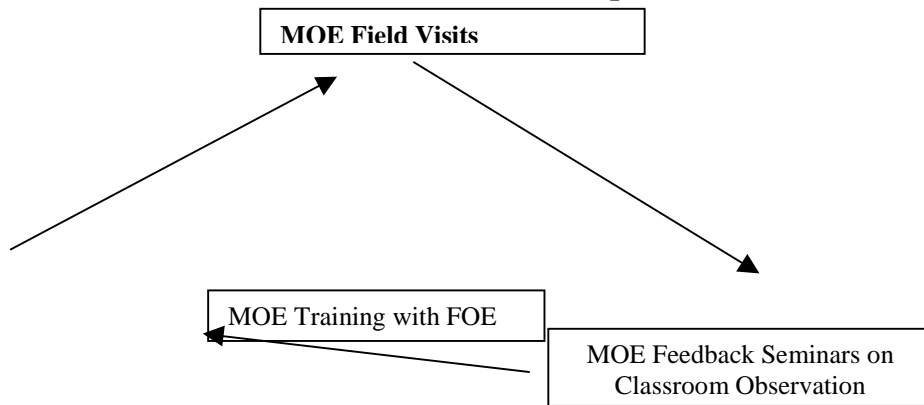
Institutionalization: Building on Teacher and Supervisory Practices

A key strategy in institutionalizing the OCS training design focused on documenting promising practices by OCS teachers and supervisors through photographs and teachers' own descriptions of classroom activities. These were compiled and incorporated into the training materials and activities. Not only did this aspect of the project highlight local knowledge, but it also fostered a sense of local ownership in the OCS system. Building institutions from the ground-up is essential to improving the institutional connections with the One-Classroom Schools Directorate and the Education Faculties. But one needs to keep in mind that careful attention needs to be placed when developing support from key policy and decision makers within the MOE as they control the parameters of innovation. Without their support little can be accomplished.

Figure 2. Training Cycle Underlying the LearnLink Training Design



LearnLink Ends! MOE Assumes Implementation



*Cotraining with Lead Trainers

Project Management and Implementation

Due to the rescoping of the LearnLink Project and the transfer of the interactive radio instruction component to the IELP-II Project, coupled with the advances in the support services offered by the AED-Dokki office, the management structure was modified in substantial ways. Moreover, by creating a Training Advisory Board and shifting the counterpart agency from CCIMD to the Division of One Classroom Schools, LearnLink work moved rapidly forward. As a result, LearnLink was able to accomplish all Task Order outcomes, which will be discussed in the following sections.

Contract Modifications and the Release of Personnel to IELP-II

In reference to the original Task Order #800 Budget dated June 19, 1997, Long-Term Technical Advisor, Mr. David Van Hammen, and the short-term technical advisers for interactive radio instruction became employees of IELP-II. Dr. Narymane El-Nashar, LearnLink's Distance Education (CCN) specialist was also transferred to the IELP-II project along with equipment and resources integral to their work activities.

The Training Advisory Board

The rescoped LearnLink Teacher Training and Materials Development Project collaborated with MOE and worked within the Ministry of Education. Mr. Ragab Sharaby, First Undersecretary to the MOE, served as the Chairperson of the Board that included the Undersecretary for Basic Education and the General Director for the Division of One Classroom Schools. In addition to the MOE officials, the Board's membership included the Undersecretary of Education and their respective Directors of One Classroom Schools from each governorate. These individuals represented the primary decision makers and field supervisors in each of the governorates. Because of historical tensions between the MOE and faculties of higher education, no member of the faculty of education sat on the Board.

Project Staffing and Level of Effort

LearnLink staff consisted of the Chief of Party, a finance and administrative officer, a monitoring and evaluation specialist, a materials development specialist and translator, two administrative assistants, an office assistant, one driver, and a near full-time lead trainer. The Lead Trainer was an Egyptian college professor with extensive training and development experience. He had primary responsibility for training materials development and training implementation. He worked with 10 Egyptian consultant trainers to carry out all LearnLink training. In addition, LearnLink subcontracted organizations to help with such tasks as data collection and analysis

Monitoring and Evaluating Project Implementation

The monitoring and evaluation team, using the initial training needs assessment data and the finalized training design, developed a series of instruments to measure trainee level of satisfaction across a range of variables. In addition, observation instruments were developed to measure training transference to the classroom. Lastly, three case studies were conducted, one in each governorate, in order to better understand and describe instructional improvement from the perceptions of students, parents, teachers, and supervisors.

Data collected by the monitoring and evaluation unit described project activities and results in five general areas:

1. Training process and outcomes
2. Training transfer and application to the classroom setting
3. Updated methods and means by which teachers are observed and coached
4. The utility of the teaching and trainers manuals
5. Revision of the training system to better meet emerging needs

Results from these monitoring activities are summarized in the following sections. Integral to monitoring these five areas was documentation of progress towards meeting deliverables and collecting and disseminating the major findings. These are:

- An evaluation of the TOT and subsequent application of that training under the supervision and coaching by LearnLink Lead Trainers during OCS teacher training and follow-up observation in the field.
- A cascade training design where the DTII - U.S.-based training participants worked with the LearnLink staff to develop plans whereby they transferred knowledge and experience obtained from their US multigrade training to their respective work units.
- Three case studies that describe teaching practices and innovations relating to training and other attributes contributing to school outcomes.
- A Final Summative Evaluation of the LearnLink Project, consisting of a postproject field evaluation of student and teacher performance using elements from the baseline survey.

Addressing USAID's Strategic Objective Two

LearnLink did not build into the project design a solid linkage between the end-of-project outcomes and their contribution to S02. This was due, in part, because S02 at the time of this re-scoping was itself undergoing a transition. In addition, it was believed that the increases in educational quality and student performance would likely increase the demand for quality education for rural girls. However, because the OCS do not keep systematic attendance records by policy mandate, it is difficult to measure attendance except in an anecdotal way based on teacher and supervisory interviews.

Training Design Implementation

The training design fell into three major stages: 1) an assessment study to describe needs, 2) Phase I training focusing on teachers in grades one through three, and 3) Phase II focusing on content area teaching in grades four and five. Underlying the training design were a set of principles, which helped ensure consistency across training events and increase training transfer to the OCS. In general, these principles were founded on the concept that the best training is one that models the context where the training will ultimately be applied. In this case, that context was the multigrade setting of the OCS. Moreover, these principles incorporate the use of active learning while simultaneously building supportive, positive relationships among trainers and trainees. Moreover, training must be ongoing and continuous and not a single event with little or no follow-up.

As a result, each phase of training incorporated provisions for teacher post-training observation and a feedback seminar. In order to ensure the successful use of these training principles, LearnLink trainers conformed to the following guidelines:

1. Reflect participant needs in training content.
2. Simulate the multigrade classroom, especially in terms of class management, class organization, sharing responsibilities, and time management.
3. Practice strategies used in OCS such as self-directed learning, group work, and cooperative learning.
4. Learn and practice the basic elements of successful teaching: careful planning, active participation and cooperation, application of learning, and evaluation in ways that simulate applying these skills in the multigrade OCS.
5. Use experiential learning activities such as drama, simulation, or role-play as a means of drawing upon trainees' prior and collective teaching experiences.
6. Continuously monitor, assess, and adjust participant and trainer activities and roles to maximize learning.

Baseline Assessment Study

A stratified random sample of 40 OCS was selected for the study. In order to obtain detailed descriptive information on the OCS and their operations, survey and observation instruments were developed and data collected from 114 teachers and 773 students. The study describes school, teacher, and student characteristics including common instructional practices. Four goals framed the study:

1. Describe changes and improvements in the OCS since its earliest inception in 1981;
2. Provide information for future development activities in small, rural, Egyptian schools;
3. Identify multigrade instructional approaches for potential dissemination to other OCS and other small schools in Egypt; and
4. Develop recommendations for improving instructional quality.

The study represented a modest effort to expand understanding of the OCS in light of the issues

and problems regarding multigrade teaching reviewed in the research literature. Egypt's current One Classroom School for girls was created under an initiative sponsored by the First Lady of Egypt, Mrs. Suzanne Mubarak in 1993. Unlike previous OCS efforts, the MOE set up a division at the national level responsible for implementing and supporting the schools, including a OCS division in each governorate. Supervisors in each governorate have been permanently assigned to a set of OCS and are responsible for grades one through three. However, at grades four and five, content area supervisors from the government primary schools are randomly assigned to supervise teaching in the subject areas. This arrangement makes their level of support uneven.

The reader needs to keep in mind that although this is the first comprehensive study of the 1993 OCS model, the sample size and methodology limit the generalizability of the results. Over 2000 OCS operate in the 26 governorates of Egypt across a wide range of population density, wealth, and rurality. However, the results provide a useful foundation upon which to identify multigrade-promising practices and needs that can be used in planning OCS policy and training for teachers and supervisors.

Student performance data, classroom observation, and survey results collected from 113 teachers and over 700 students in 40 schools revealed positive outcomes that suggest these schools could serve as seedbeds for instructional improvements with a potential for transference to other schools in Egypt. However, results also revealed areas for improving the quality of teaching and learning.

Three teachers are assigned to each school: an academic teacher for grades one through three, one for grades four and five, and a vocational teacher. All teachers generally play active roles in providing direct instructional support to one another. The majority of teachers range from 21 to 35 years of age. Sixty-eight percent reported being married which suggests a degree of stability in their respective communities. Teachers also reported, an average of half an hour travel to reach the school, suggesting they often live in close proximity to where they teach.

Teachers reported minimal to non-existent pre-service training for working in the OCS. Only 18 teachers (16%) have a university degree while 29 teachers (26%) have a secondary degree plus two years of college. This means that the remaining 66 teachers (58%) have no post secondary education. Because a policy priority has been placed on hiring woman from the local community, teacher qualifications often tend to be quite low. Therefore, a high priority need exists for in-service training.

Diverse and instructionally complex ranges of students attend the OCS. Girls from age 8 to 18 are found not only across grades, but also even within a grade. They come from homes with high levels of illiteracy and limited resources such as electricity, running water, or an indoor bathroom. Despite these conditions, students voiced high aspirations for their futures and performed well on the standard governorate achievement tests given at grades three and five. Students reported feeling very positive about their schools, teachers, and one another. In terms of student attitudes and performance, the government investment in the OCS appears to be yielding benefits for girls who would otherwise not be acquiring an education.

Schools generally were found to be productive, well maintained, and serving a valuable need in

their communities. However in some governorates over 30% of schools were housed in temporary facilities. The study generated valuable insights into the operation and functioning of teachers, supervisors, and students. Moreover, the Mrs. Mubarak OCS have made significant improvements over the previous efforts to implement one-classroom schools in the 1970s. The current model begun in 1993 demonstrates that important differences in the lives of girls can be made provided sufficient infrastructure exists to provide ongoing training and support.

Like the students, teachers generally had very positive feelings about their school and their colleagues. However, some negative feelings did surface with teachers who voiced that they were not treated as well as teachers from the formal primary school nor were the schools viewed by the community with the same status as formal primary schools. Schools appeared to be stigmatized because the public often viewed them as only providing literacy instruction and not offering the same curriculum as government primary schools.

Positive outcomes identified in the study relate to the MOE's intent on improving the quality of learning over previous OCS. The basic physical and management infrastructure has been built to provide a foundation for the next phase of improvement. Data from this study suggest a need to focus on improving the multigrade teaching curriculum and expanding the skills and competencies of teachers and supervisors to deliver a better quality instruction in the multigrade setting.

The facilities and resources of the OCS have greatly improved over previous efforts to implement one-classroom schools. But there are areas the MOE might consider in their plans to enhance the current model. These include providing:

1. Suitable land and constructing schools for those housed in temporary facilities.
2. Teachers with appropriate multigrade curriculum and instructional resources.
3. Each school with the necessary science equipment to carry out the objectives specified in the curriculum.
4. Each school with a diversity of library books, especially ones that allow for career exploration and depict the world beyond Egypt.

The highest priority need emerging from this study revolves around the preparation and training of teachers to work in the multigrade setting of the OCS.

5. OCS programs and courses of study need to be offered by faculties of education.
6. Supervisors need training in order to provide technical help and support for improving teaching and learning in the OCS.
7. Provide in-service training on a consistent, long-term basis in such multigrade areas as: classroom organization and management, community engagement, improving student attendance, addressing student aspirations and building upon their interest and motivation, and planning and preparing for instruction in a multilevel classroom.

LearnLink focused its training on addressing recommendations two, six, and seven.

Results of the Phase I Training

During Phase I, primary and advanced TOT were held for OCS supervisors in order to enhance the capacity of the MOE to improve the quality of learning in the OCS (see Table I). Two hundred and sixty-four supervisors received training which provided LearnLink lead trainers with a sufficient number of staff to train all 821 OCS teachers in the governorates of Behaira, Beni-Suef, and Minia (see Table 2). LearnLink staff worked collaboratively with the MOE to develop a set of training materials and resources to address the needs of the OCS teachers. The training design also provided follow-up support to teachers and supervisors to maximize the transfer of training to the classroom. Monitoring and evaluation measures were integrated into the training design. Every training activity produced information for evaluating the success of the training as well as identifying areas for improving the delivery and quality of future training.

Table 1. Number of OCS Supervisors Receiving TOT in Phase I

Session	Dates	Session Focus	Behaira	Beni-Suef	Minia	MOE	Totals
1	October 1998	TOT and supervision	11	11	10	4	36
2	November 1998	TOT and supervision	11	11	11	4	37
3	December 1998	TOT and supervision	11	11	12	4	38
4	October 1999	Advanced TOT	15	15	15	6	51
5	December 1999	MG strategies/supervision	11	13	11	2	37
6	February 2000	MG strategies/supervision	19	14	11	2	46
7	March 2000	MG strategies/supervision	18	0	0	2	20
Totals			96	75	70	24	265

Across all assessment measures, participants indicated that the training had addressed their needs and met their expectations. In part, this high level of satisfaction reflects the context within which the training was conducted. Teachers and supervisors had little previous experience with training designed specifically around their needs. In fact, based on data from the LearnLink assessment study of the OCS in the three governorates, teachers had received almost no pre-service training and only a small amount of in-service. Thus the LearnLink training had few precedents for comparison.

Table 2. Number of Teachers Trained in Phase I

Session	Dates	Behaira	Beni-Suef	Minia	Totals
1	December 1-6, 1999	39	35	38	102
2	February 20-25, 2000	32	36	39	107
3	March 5-9, 2000	39	43	44	126
4	March 26-30, 2000	55	43	46	144
5	April 2-6, 2000	56	57	43	156
6	April 9-13, 2000	64	58	Completed	122
7	April 16-20, 2000	Completed	54	Completed	54
Totals		285	326	210	821

Table 3 presents results of the post-training evaluation survey which used a four-point scale, where 1 =strongly disagree and 4=strongly agree. Across all training activities, regardless of whether they were for supervisors or teachers, the highest rated subgroups were E, *The Training Methods and Style* and ~ *Overall Evaluation of the Training*. Training methodology was not a random occurrence, but included thoughtful and wellarticulated principles of training.

Table 3. Post-Training Evaluation Results for Each Subgroup

Subgroups (1=strongly agree, 4=strongly disagree)	Behaira	Beni-Suef	Minia	Mean
E. The Training Methods and Style	3.6	3.6	3.7	3.6
I. Overall Evaluation of the Training	3.6	3.6	3.6	3.6
B. Classroom Management Objectives	3.4	3.4	3.6	3.5
C. Applying Teaching and Learning Strategies	3.4	3.4	3.6	3.5
F. Materials and Training Content	3.5	3.4	3.6	3.5
G. Teacher Resource Manual for the OCS	3.6	3.4	3.6	3.5
D. Assessing Student Performance	3.3	3.4	3.6	3.4
H. Training Schedule and Organization	3.4	3.4	3.5	3.4
A. Self-Directed Learning Objectives	3.3	3.3	3.4	3.3
Grand Mean	3.4	3.4	3.6	3.5

Approximately one month after training, supervisors and lead trainers conducted teacher observations using an observation schedule aligned with the training content. A random sample of teacher observations was selected from each governorate. The observation scale consisted of thirty-seven items organized into four subgroups: Lesson Preparation (11 items), Classroom Organization and Management (14 items), Learning and Teaching Strategies (14 items), and Evaluation (12 items). A three-point rating scale was used for each item, where 1 = low and 3 = high. Results of the observations have been presented in Table 4. For each competence area, the data reveals, on average, that teachers received ratings above the midpoint suggesting that positive changes in teacher practices have occurred (i.e., midranges for: A= 22, B=28, C=28, and D=24).

Training transfer appeared strongest for the areas of Lesson Preparation (A), Class Organization and Management (B), and Learning and Teaching Strategies (C). For these three areas, scores reflected, on average, 80% of the total range. For example, for Lesson Preparation, the average score was 27 or 82% of the total range (i.e., $27/33=82$). The lowest area was Evaluation (D) where the average score was 27 or 75% of the total. These results suggested that teachers have learned new practices and were applying them in their teaching.

Table 4. The means of the main four areas observed in the OCS

Competence Area	Score Range	Behaira (N=71)	Beni-Suef (N=71)	Minia (N=62)	Total (N=204)
A. Lesson Preparation	(11-33)	29	26	26	27
B. Class Organization and Management	(14-42)	37	32	33	34
C. Learning and Teaching Strategies	(14-42)	36	30	32	33
D. Evaluation	(12-36)	30	26	26	27
Total	(51-153)	131	112	118	121

Comments by teachers from each governorate help illustrate what they had learned, how it was being used in their multigrade classes, and how it had changed student learning and relationships:

I was depending on myself in the teaching and the preparation of all the teaching aid

materials and activities, but now I use active learning methods and depend on the students.
- Minia Teacher

The training helped develop positive student behavior. They deal with each other nicely. They became very positive towards learning and sharing with their peers. -Behaira Teacher

Student motivation improved and their attention increased and this resulted in an increase in their understanding. Also, student behavior improved and this helped their learning. — Beni-Suef Teacher

Based on the success of the Phase I Training, LearnLink adhered to the same principles and activities for Phase II; although the content changed to address the subject areas taught in grades four and five as per the needs analysis conducted. To facilitate common understanding and mutual support, supervisors and teachers were trained together, whenever possible.

A teacher from Behaira poignantly described the types of changes the training had brought about for both her and her students and described the impact the LearnLink Project was having on the OCS:

The students changed from being passive receivers of information to torches of activity because they are learning to be self-directed, using peer learning, and active learning. They are taking care of the class preparation, cleanliness, and taking care of routines like taking attendance, dates, and class organization.

Results of the Phase II Training

Phase II training followed the same principles and design events as Phase I. Phase II goals were twofold: 1) continue infrastructure development by training a cadre of subject area supervisors responsible for grades four and five in the three governorates, 2) train all the OCS teachers in strategies for improving instruction in subject areas, primarily for grades four and five. The *Multigrade Teacher Resource Training Manual* continued as the core-training document. In addition, special training materials focusing on content teaching for grades four and five were developed. Returnees from the US-based multigrade training participated in the materials development workshop by sharing their experience in the creation of materials for improving relations with the community. Both goals were achieved during the training as measured by post-training survey data and classroom observations conducted by LearnLink lead trainers in collaboration with content area supervisors.

Table 5 provides an overview of each training event during Phase II along with the number of individuals participating in each activity. Seven hundred and seventy-eight OCS teachers and a 117 subject area supervisors received intensive training and follow-up implementation in the field. Of the 117 supervisors trained, 32 participated in a TOT and co-trained with LearnLink trainers. Following each training event, participants completed a survey designed to measure their levels of satisfaction across six subgroups.

Evaluation data from each LearnLink training and implementation activity revealed that

participants perceived their involvement to be highly beneficial. Table 6 presents the mean scores for each of the seven subgroups assessed after the training. The questionnaire used a four-point scale, where 1 = strongly disagree and 4 = strongly agree. Each subgroup consisted of two or more items that teachers rated independently. An average was calculated for each item and then collapsed into a subgroup score.

Subgroup means have been ranked from the highest mean score (i.e., B. *Trainers Methods and Style*) to the lowest rated subgroup (C. *Training program content*). The second highest rated topic was item D, *Strategies Manual for Teaching Grades Four and Five*, followed by *Teaching and Learning Strategies in Grades Four and Five*. The high ratings for B, D, and A suggest that teachers valued the training methodology and the emphasis trainers placed on practical classroom application. The trainees appeared to like how the content was presented and how the trainers treated them. What is important to keep in mind is that the training methodology stressed high levels of trainee participation and cooperation because these characteristics reflect essential behaviors of group work in the multigrade classroom. Moreover, trainers modeled active learning and engagement so teachers could experience these strategies.

Table 5. Teachers and Supervisors Trained During Phase II Training

Session & Date	Behaira	Beni-Suef	Minia	MOE, Cairo
		Materials Development*		
July 16-19	4 supervisors 1 faculty of education (FOE)	6 supervisors 1 FOE	3 supervisors 2 FOE	4 supervisors 2 policy makers
		Training of Trainers*		
July 22-27	8 supervisors	8 supervisors	8 supervisors	7 supervisors
		Content Supervisor Training (CSA)*		
August 5-10	0	29 supervisors	29 supervisors	0
August 12-17	28 supervisors	0	0	0
		OCS Teacher Training		
August 19~24*	49 teachers	63 teachers	50 teachers	0
August 26-31	57 teachers	63 teachers	51 teachers	0
September 2-7	50 teachers	62 teachers	52 teachers	0
September 9-16	58 teachers	59 teachers	45 teachers	0
September 16-21	50 teachers	69 teachers	0	0
TOTAL	1 FOE 43 CSA 264 OCS teachers	1 FOE 43 CSA 316 OCS teachers	2 FOE 40 CSA 198 OCS teachers	2 policymakers 11 supervisors

. These training sessions reflect the involvement of the participants who attended the USbased multigrade training sponsored by the DT2 project.

Unlike Phase I training, participants gave their lowest ratings to *F. Summary of Overall Training* followed by *C. Training Program Content*. In part, these results may relate to the fact that grades one through three teachers participated. Since they do not have responsibility for teaching grades four and five or the subject areas of science and social studies, they may have felt the

training did not address their needs as well as LearnLink’s previous phase of training. However, it needs to be kept in mind that all subgroup mean scores were well above the scales midpoint of 2, suggesting teachers held positive to very positive perceptions of the training.

Table 6. Ranked Subgroup Means for the Teacher Evaluation Results

Subscales	Behaira	Beni-Suef	Minia	Mean
B. Trainers Methods and Style	3.63	3.65	3.78	3.69
D. Strategies Manual for Teaching Grades Four and Five	3.47	3.50	3.70	3.56
A. Teaching and learning strategies	3.38	3.40	3.54	3.44
E. Training site and duration	3.26	3.33	3.61	3.40
F. Summary of over-all training	3.09	3.33	3.66	3.36
C. Training program content	3.25	3.26	3.45	3.32

More importantly, teacher observation data collected from the field at the point of implementation demonstrated that teachers and supervisors were applying what they had learned and were improving the quality of learning for students. The OCS observations were conducted one month after teachers received five consecutive days of training. One hundred and fourteen supervisors participated in the field observation in each governorate: 57 from Behaira, 25 from Beni-Suef, and 32 from Minia. LearnLink training consultants also participated in the OCS observation as mentors and to assure quality control.

All supervisors received the same training as teachers and, additionally, were trained specifically on how to use the observation protocol (see Appendix 6). An observation team was formed for each governorate and lead by a LearnLink trainer who conducted a one-day meeting with the supervisors in the field before conducting teacher observations.

During this meeting, an observation plan was developed and schools were assigned to each supervisor. Different schools were assigned than the ones they normally supervised. This helped ensure more objectivity than what might otherwise occur if they observed in their formally assigned schools. In addition, a review of observation objectives and procedures was conducted.

It was emphasized during the meeting that the observation process was not an evaluation of teacher performance. Observations were designed to identify teacher strengths and needs as they implemented new teaching skills. Two days of observation were required before completing an observation form. This was to allow for sufficient time for collecting data and to help create a relaxed tone for data collection.

A random sample of teacher observations was selected from each governorate. The observation scale consisted of thirty-seven items organized into four subgroups: Lesson Preparation (11 items), Classroom Organization and Management (14 items), Learning and Teaching Strategies (14 items), and Evaluation (12 items). A three-point rating scale was used for each item, where 1 = low and 3 high.

During the observation, data collectors rated the degree to which they perceived a teacher implementing a given observation item. For example, under Lesson Preparation, if the data collector reviewed the teacher’s lesson plans and noted that behavioral objectives were written

for each lesson; the teacher would receive a number three indicating a high level of implementation. This procedure was followed for each item and then summed for each subgroup (see Appendix 7 for the Teacher’s Performance Observation List).

Table 7 presents results from the analysis of the observation sample. Mean scores for each subgroup were computed by governorate. In general, it can be seen that all the means lie in the upper limit of each respective range. Each sub-group achieved scores well above the midrange for each subgroup area. Lesson Preparation had the highest mean (i.e., 27).

This suggests, that on average, teachers were observed to have implemented 82% of the 33 items being observed. Classroom Organization and Management was the next highest group (81%) followed by Evaluation and Learning (78%), and Teaching Strategies (76%). Behaira consistently scored higher than the other two governorates in implementing the training. However, all governorates demonstrated a positive trend of training transfer. Appendix 7 includes the detailed results for all items.

Table 7. The Means of the Main Four Areas Observed in the OCS

Subgroup Areas	Behaira (N68)	Beni-Suef (N=90)	Minia (N40)	Total (N198)	Range
A. Lesson Preparation	24	29	27	27	(12-36)
B. Class Organization and management	29	34	35	34	(14-42)
C. Learning and Teaching Strategies	26	32	31	33	(13-39)
D. Student Evaluation	22	28	25	27	(12-36)
Total	101	123	118	121	(51-153)

Because the LearnLink Project contract closed two months after the final training had been completed, long-term follow-up data could not be collected to assess the long-term durability of the training interventions. What remained to be seen was whether the MOE had the will and resources to sustain the momentum and on-going support to OCS supervisors and teachers initiated with the LearnLink Project. Discussion with both USAID and the MOE indicated a strong desire for long-term sustainability of the interventions. LearnLink’s final policy conference, which was devoted to discussing and planning for the creation of plans for sustaining OCS improvement efforts implemented by LearnLink, demonstrated the desire and intent of the MOE to continue the work initiated by the LearnLink Project.

Case Studies of Three One Classroom Schools

Introduction

To improve the quality of education in OCS, LearnLink worked collaboratively with the Egyptian MOE to provide a training program for OCS teachers and supervisors in the governorates of Behaira, Beni-Suef and Minia. As part of the project training and evaluation design, field visits were conducted following the training in order to provide follow-up support to teachers and to describe the transference of training to the work setting. As parts of these post-training field visits, a group of three OCS was identified from a pool of nine schools in order to conduct an in-depth case study in each governorate.

The original nine schools were identified through discussions with supervisors and LearnLink consultant trainers. The primary criterion for being placed in the pool of candidates was the schools' reputation for being a place where girls were learning. The case study design was developed around four questions:

1. What have teachers and supervisors learned from the training that they have transferred to the OCS?
2. What promising practices can be identified for potential dissemination to other schools?
3. What kind of results are new practices having on learning?
4. Are there OCS needs that could be addressed through additional training?

Methodology

A study team, consisting of two LearnLink staff and a US-based educational consultant, visited the nine schools where they informally interviewed students, teachers, supervisors, and parents. After a careful analysis of the data and discussions with MOE representatives, one school from each governorate was selected. Each school also represented an OCS at full or nearly full capacity. Thus, each school demonstrated the stress and demands of a school filled to capacity. In Behaira, El-Sharnouby was selected because it represented an OCS in a temporary building without water, electricity, and few resources. The second school chosen was El-Sanaira in Beni-Suef. It represented a school in a permanent building experiencing teacher attrition. An experienced teacher who had received LearnLink training was transferred to another school and a new teacher replacement was hired. Lastly, El Far in Minia represents a remote and isolated school. Taken together, these three schools illustrate three common characteristics found throughout the three governorates:

- A school in a temporary building with few resources
- A school located within the community undergoing teacher transition
- A school in a remote area

Moreover, since each school showed evidence of a positive climate and had reputations for quality learning, the study team was interested in identifying variables that appear related to positive school attributes. This interest was especially keen regarding ElShamouby School in Behaira where teachers worked in substandard conditions with few of the resources commonly found in standard OCS.

Interview questions were developed for students, parents, teachers, and supervisors (see Appendix 1). Native Arabic speakers conducted all interviews in the field setting. Interviews were tape recorded and later transcribed into English. Schools were also visited and observed to identify teaching practices and instructional materials. The study team visited the Behaira and Beni-Suef schools four times and the school in Minia three times. All data was collected from August 1 to November 15, 2000, well over six months from the completion of the first round of teacher training held in December 1999. It was believed this period was sufficient time for teachers to use and practice what they learned during training.

Background and contextual information on each school will be presented first, followed by results from interviews and classroom observations. The schools will be discussed, drawing out implications that may have benefit to other OCS and future projects.

Results

El-Sharnouby OCS, Behaira

Behaira has 134 OCS located in twelve directorates. El-Sharnouby OCS is located in El-Sharnouby hamlet in Delngat Directorate (District). Delngat has a total area of 390 square Km and a population of 255,164. It has one city, 36 villages, and 664 hamlets. It has 164 regular formal schools, 121 located in rural settings and 43 in urban areas. The average class size is 36. 8 students. El-Sharnouby OCS typifies an OCS in a temporary building with a few resources. An old mosque donated to the school when a new mosque was built, sits within the community, a few meters from the main road. The building is old with broken windows and a partially dilapidated wall. There is no toilet facility, water or electricity. The students use the toilet facilities in the new mosque. The school has none of the standard OCS vocational equipment such as stove, refrigerator, or sewing machine.

El-Sharnouby OCS started two years ago and has three teachers. Entesar graduated from a two year Industrial Technical Institute. She worked for five years in the technical secondary school and for one year in the OCS. She teaches the fourth and fifth grades. Nagaat graduated from the teacher secondary school. She worked for two years in the primary school and moved to the El-Sharnouby OCS when it opened in 1998. She teaches the first three grades. Madiha provides vocational training. She graduated from the teachers' secondary school and has worked for thirteen years in the formal government primary school before transferring to El-Sharnouby. She is considered the lead teacher. She and her husband live in the local hamlet. Hannan, an itinerate English teacher provides instruction several days a week. She has a degree in social services and a diploma in education. Prior to joining the OCS she taught English for three years in the formal primary school.

The school has twenty students, five in each of the first three grades, four in the fourth and one in the fifth. Three primary supervisors are assigned to the school. One supervises the academic curriculum of the first three grades and two work with the vocational program: one for arts and one for the other vocational activities.

A Visit to El-Sharnouby

To reach El-Shamouby, we drove north from Cairo toward Alexandria for about 90 minutes, turning east into Domanhour, the largest city and capital of Behaira. Winding our way through the busy streets, we crossed through the city and turned onto an agricultural road that passes besides rows of cotton, corn, and fields of vegetables. Small hamlets with people and their

animals, farm equipment, and children can be seen along the roadway. After 45 minutes, we saw a new mosque on the edge of the Sharnouby Hamlet; this marked the location of the OCS. Luckily, the school had a government flag on the roof or we would not have recognized it. The entrance to the school passed through an open courtyard painted green. There was no door or roof here just the remnants of a large room. Directly ahead was a door into the classroom, which hung loosely open letting in extra light. Upon entering, we saw children sitting at wooden desks that stretched along the main room in parallel rows facing each other. First, second, and third grade students sat working at their desks or with the teacher. Several girls worked in an area along a wall labeled as a math corner. We saw several other corners around this crowded space labeled as Arabic, math, library, and a Goha folk character writing corner.

In the back of the room five girls worked with a teacher. These girls were in grades four and five. The entire classroom was long and narrow; divided into two sections by a break in the roof. This break served as the primary source of light for the school. But it also subjected the classroom to the outside. The walls were painted a turquoise blue, but much of the paint was peeling. The white ceiling was in similar condition with patches of gray cement coming through (see Appendix 2 for pictures of the school).

Around the room were posters and displays that looked handmade from locally available materials such as cardboard, Styrofoam, string, and twine. Some displays showed rules of behavior; illustrations of the body, and along one wall next to a math-learning corner were folders hanging by ribbons from hooks on the wall. Each folder showed a picture of a student, their name, and a title, Assessment Kit. In the corners were boxes attached to the walls with activity cards, Arabic letters, and math problems. We were impressed with the contrast between the old, dilapidated building and the teacher made materials that adorned the walls. Most importantly, we were pleasantly surprised with the positive behavior of the children who ranged in age from five to 15. They appeared independent and cooperative with one another and the teachers. This was especially noticeable while they worked in a corner area. The students and teachers interacted good-naturedly with smiles and humor. We were amazed how open the students were, often asking to show us their work or explain something about their classroom.

Interviews

Three students and their parents were interviewed separately. In addition, the vocational supervisor and each teacher were interviewed. A high level of consistency was found in their comments and observations and strong affirmation that the training produced positive results in the school.

What Students Said

Aya is nine years old and in the first grade. El-Sharnouby is the only school she has attended. She has one brother and he is younger. She says she wants to graduate from the OCS and join the preparatory school and eventually become a doctor. Yassmeen is 11 years old and in the third grade. She has been at the school for two years. She comes from a large family of six sisters and five brothers. Her younger sister, Heba, also goes to El-Shamouby. She said her older brother

dropped out of school, but the youngest attends the preparatory school. When asked why she did not attend the formal school like her brother, she said her dad was too poor to pay the fees. She enrolled in the OCS because its free. Yassmeen said she wants to go to college and become a writer. Her comments about her aspirations provide an insight into the value these schools serve: “I will complete the preparatory school and go to the Faculty of Media to be a writer.”

Zeinab is the oldest student. She is 14 and in the fifth grade. She comes from a blended family with three sisters who live with her mother and three from her father’s second marriage. All of them have done well in school. She was especially proud of the girls that lived with her mother. One completed studies at the Institute of Commercial Studies, one is in her first year of nursing school, and the third is in the secondary commercial school. Zeinab expressed jealousy of her sisters because she only attended the Kuttab or mosque school:

Before I joined this school, I used to cry when one of my sisters passed an exam. My uncle said to me, ‘you must join the school. You are as good as them and will do good in school. ‘ I used to go to the Kuttab till last year and I was very clever in learning the Quraan. I found the OCS is a very good chance for me, especially since I intend to complete higher education.

Zeinab’s desire for an education reflects the aspirations of all the students interviewed and is consistent with the results of the OCS study conducted by LearnLink (2000).

From the students it is learned that teachers assign them to groups and give them responsibilities for cleaning the classroom and helping keep it organized. According to Aya, “I start the day with cleaning the school with my colleagues. We organize the desks and collect the garbage.” Students also work in the corners and participate in peer learning activities. Zeinab describes how she works in a group: “If the teacher assigns a group to do something together, we let the one who is best in a specific part do it and the others can do the rest.” When Yassmeen works in a learning corner, she says, “I might use the pocket chart to make a story or in the math corner I may do some problems to practice division and multiplication” (see photographs in Appendix 2). When asked how their school differed from the formal schools, they mentioned the small number of students and the individual attention they received from the teachers. Zeinab was articulate about these points:

The number of students in the OCS is small compared to the large number in the regular school. Here if one of the students could not understand something, the teacher spends more time with her until she gets it. In the regular school, the teacher leaves class when the period finishes regardless if the students understand or not. Here we have vocational training.

What Parents Said

All three parents voiced strong support for the school saying that it was a place where their children learn and are treated well by the teachers. All three also mentioned that Madiha, who teaches vocational education, was an asset to the school and community. Aya’s father, for example, said that he learned about the school from Madiha who told him that his daughter “will

be treated and educated well.” When asked what they would change about the school, the parents were unanimous in saying nothing except the building. Zeinab’s mother reflects on her support for the school, especially Madiha, when she says,

Everything is fine, especially since we have Ms. Madiha who is a very good person and in contact with all the parents. God bless her kids. She was in the regular primary school and transferred to this school to serve her community.

Good communications with parents and evidence of service to the community appear as strong conditions for community support. These parents have high expectations for their daughters and said they wanted their daughters to be doctors. Yassmeen’s father seems to summarize their aspirations for a better life when he says, “I wish to see her a doctor, an engineer, a teacher, or any other respectable position away from working in the farms.”

What Teachers Said

As one might expect, teachers were more complex in their responses, providing insight into their teaching practice. Before the LearnLink training, none of the teachers said they had received any pre-service training preparing them for a multigrade teaching assignment in an OCS. Ironically, Nagat said the only training she received before LearnLink was on computers and none of the OCS in Egypt has a computer. When asked what they found beneficial in the LearnLink training, they stressed numerous points. Nagat says she learned about “teaching strategies such as cooperative learning and self-directed learning. I also learned about lesson planning for the three grades.” She goes on to say that because of the training, “the supervisors now are emphasizing the application of these learning strategies.” This comment illustrates a LearnLink strategy that emerged out of discussions with the MOE, namely, training teachers and supervisors together in order to ensure training exposure for the greatest number. Interestingly, no one anticipated the benefit to be gained. The shared experience improved relations between supervisors and facilitated the implementation of new ideas into the OCS. Nadia, who supervises El-Sharnouby, made a plea that training in the future should continue to be done with teachers and supervisors together as it was a primary factor contributing to training transfer into the classroom:

Providing continuous training would be very beneficial. We have acquired all these skills from just one training program, so what would be the case if we had more. It was a very good idea to provide the same training for both the supervisors and the teachers. In that case, both of them have the same ideas. This was one of the main factors that helped the success of El Sharnouby School.

The principles of the training design emphasized the importance of modeling the instructional practices of the multigrade school such as cooperation, active participation, and the assignment of responsibilities for organization and management. This approach to training appears to have been productive. According to Nagat,

We learned how to engage students by giving them more responsibilities in organizing the class, developing the teaching aids and selecting activities. The students became more self-directed and creative. For example, when Yassmeen and Zeinab came back from the Cairo

conference, they developed new teaching aids similar to what they had seen in the exhibition. One was on crops and the other on direction (north, south, east, and west).

Even more importantly is what this observation says about the teachers and their willingness to allow students to play a greater role in the classroom. Traditionally in formal schools, students play a passive role and the teacher assumes nearly all responsibility for classroom activities. During training, teachers learned to change their roles and to assume a more facilitative role that allowed students greater responsibility. Nadia thinks the formal schools could learn from the OCS teachers: “If these teaching strategies were implemented in the regular primary schools, the education would be improved. It is an achievement that we implemented them in the OCS and helped the students become self-directed.”

What Supervisors Had to Say

Only the vocational supervisor from El-Sharnouby, Nadia, was available for an interview. Nadia has worked for the MOE for 23 years and began working with the OCS when they first opened in 1993. She graduated from the education secondary school in 1969. In 1993 there were only three OCS in Behaira and by 1996 there were 20. Nadia said the early years were difficult as most schools were in temporary buildings and the schools depended mainly on locally generated funds to operate. Currently, she supervises 14 schools.

Nadia visits El-Shamouby two to three times a month and during her visits she “talks with the teachers and asks them about what they did recently in the vocational training and asks if they got their products made.” Then, she says, “I have a look at the teacher’s records and try to answer questions and solve their problems.” Nadia points out that teachers in El-Shamouby responded quickly to the LearnLink training, “they started to implement corners and the assessment kits almost immediately.” She believes “the formal schools would do a lot better academically, if teachers implemented strategies from the OCS such as self-directed learning and the corners practice activities.” She concludes by saying that “the performance of students from El-Shamouby is better than that of students from the formal schools.” the teachers, which is one of the outstanding features of the school.” The students

El-Sanaira OCS, Beni-Suef

Beni-Suef has 209 OCS located in seven directorates. El-Sanaira OCS is located in El-Sanaira hamlet in El-Fashn Directorate (District). El-Fashn has a total area of 226. 9 square Km with total population of 270,861. It has one city, 33 villages and 118 hamlets. There are 116 regular formal schools, 90 in rural areas and 26 considered urban. The average class size is 42. 7 students.

El-Sanaira represents a typical MOE designed OCS. It was selected because it illustrates the common problem of teacher attrition and how the local supervisor minimized the negative impact of a new teacher coming into the unique setting of the multigraded OCS. Moreover, El-Sanaira exemplifies an OCS at full capacity with seven girls at each grade, for a total enrollment of 35 students.

Karima teaches vocational education and has worked in the school for seven years. She graduated from the education secondary school and is 39 years old. Her first teaching job was in a formal primary school where she worked for ten years. While working in the formal school, she initiated El-Sanaira by offering classes in her home after her regular workday. Through Karima's efforts, the community donated land and a new OCS was built. Karima has stayed active in the community and serves on the local community council.

Ragaa has taught grades four and five for two years at El-Sanaira. She graduated from the technical industrial institute and has taught in the formal schools for two years, serving as both a vocational and academic teacher. Nora is the youngest teacher, recently graduating with a degree from the Faculty of Social Work. She teaches grades one through three. El-Sanaira is her first teaching job. She replaced Manal, who transferred to the formal primary school.

A Visit to El-Sanaira

We drove out of Beni-Suef City, following an agricultural canal north through fields of corn and other crops. Mr. Ali, the supervisor who accompanied us, said the area we passed through was part of a farm research project. A half-hour later, we turned off the agricultural road into Essbet EI-Sanaira, the village where the El-Sanaira school is located. Pulling up next to the school we saw local woman talking as they filled containers with water from the local well and carried them home balanced on their heads. The three teachers, Karima, Ragaa and Manal greeted us in front of the school.

When we entered the classroom, all the students stood and very loudly sang a song: "We are the one classroom school students, ages 9-14. We are the hope of our country to develop our communities." Manal said she learned the song from another teacher in Fayoum (adjoining governorate) who got the song from the MOE.

A certificate was posted high on the wall at the front of the classroom. It was earned for having the highest performing third and fifth grade students in the OCS in the governorate. Karima explained that the students have done well academically because the school has very good relations with the parents and community and the school works on academics during the summer.

The classroom furniture was arranged in three semi-circles of desks at one end (academic areas for grades one, two, and three) and a rectangular grouping of desks at the back. Storage cupboards without doors lined one wall and contained student work and classroom resources. Items appeared to be organized and neatly arranged.

Ragaa, the fourth and fifth grade teacher, conducted a lesson on environmental pollution for grades one through three. Students appeared interested and responsive to teacher questions. Ragaa explained to the observers that the lesson was not part of the regular curriculum but part of the summer activities designed to deepen student understanding of their local environment. Some students from the vocational class and a teacher were cooking a big pot of macaroni near the front door. Manal took us to see a shelf that had been designated as the library. It held approximately 20 thin pamphlet type books.

We asked Manal if she used learning corners in her teaching. She produced a cardboard box that was loaded with materials and activities made from recycled items. Some were close replicas of materials used in training and Manal and other teachers creatively produced many others. She had actively collected samples of teaching materials which she then adapted for her own students. We saw a box labeled “Shopping” with containers such as empty chips packages and a match box; small plastic containers of beans, bottle caps, and date seeds; geometric shapes made of Styrofoam; colored construction paper cards with letters and words; and cardboard cards folded and cut in to a “flip book” for creating sentences and working with the alphabet.

As we scanned the room we could see evidence of many other materials that had been made. We saw posters, charts, and displays of student work, especially vocational products. Above the door the teachers had devised an eight-foot stretch of woven twine they used to display materials and student work. In a science corner we saw hand drawn pictures of agricultural practices, the human body, and a flow-chart showing various branches of the animal kingdom. Almost every wall surface had been used for colorful displays (see Appendix 2 for photographs of the school and environs).

Interviews

Three students, three teachers, and one supervisor were interviewed. Unfortunately, time constraints did not allow for the opportunity to interview any parents. However, a consensus of those interviewed portrayed strong parental support for the school.

What Students Had to Say

Hoda is an eight year old third grader who had attended El-Sanaira for three years. She has a 14-year old brother who dropped out of school to farm. She hopes to enter the formal school system and eventually graduate from college as a doctor or a teacher. Somaya is 9-years olds and in the second grade. She has one sister and three older school-age brothers who farm. Two brothers have never attended school and one quit after he failed an exam. Somaya said she wants to become a teacher. Hanna is 13 and in the fifth grade. She has attended a formal primary school before coming to El-Sanaira. She said, "I have been in the regular primary school with my sister. We were very bad so my father transferred us here and now we are really good." She hopes to enter the preparatory school and advance to the secondary level.

All three girls were very positive about their school. Hoda and Somaya said the best part about their schools was the teachers because they taught them to read and write. Hanaa liked religion because she can read the Quraan. When asked what they disliked about the school they said nothing. Hanaa who has attended a government primary school drew a comparison saying,

The learning here is much better. The teacher explains the lesson and reads with us and spends more time with the low performance students. In the regular school the teachers sits on a chair and says a few words about the lesson. When I came here I didn't know anything. But now I am doing very well.

Like the students interviewed from El-Sharnouby, the El-Sanaira students said they worked in corners and engaged in peer learning. Hoda said when she works in a corner, “the teacher gives us an assignment to be done in the corner such as formulating words or solving math problems.” In a different use of corners, Somaya says, “we use it during the class. The teacher tells us to bring something from the corner to use in demonstration during a lesson.” Hanaa said the teacher used a map in the corner to explain directions. When asked about working with their peers, all the students indicated they read and tried to help each other understand lessons; if they needed help, they asked a classmate. They indicated that vocational training was where they worked most often together, “we practice cooking and handicrafts together.” When students described a typical school day, one can see the value of peer learning because lessons are delivered to one grade at a time leaving the other grades to work independently at their desk or in a corner. Somaya describes a typical schedule:

First we clean the class. Then we have lessons with the teacher. After the teacher finishes with us she gives us assignments of reading, writing, and dictation. Then we have a break. After the break we have the vocational period.

What Teachers Had to Say

When formal interviewing began, Manal had begun teaching at a government school and was not available. Nora, her replacement, was interviewed and supplied useful insight regarding her first experiences teaching in an OCS. Karima, the vocational teacher, serves as the leader. She has taught for 16 years, nine in the government primary and seven at El-Sanaira. In 1993, while still working in a government school, she felt a strong need to provide education for the many girls in her community not attending school. As she described it,

When the OCS was initiated in 1993, I started to develop one including girls aged 8-14 who did not enroll in the formal school. I hosted the class in my house for two years. During that time I used to go to the primary school in the morning and work in the afternoon in the OCS in my house. The size of the class was 20 girls. The OCS supervisor, at that time, told me to try to find a place to build the school. I presented the idea to people in Ezzbet ElSanaira. One of them offered the land and we wrote to the General Authority for Educational Building and it was approved. The school was built in 1996.

Karima’s experience in working with the community, like Madiha’s in Behaira, underscores the value that positive relations in the community have on school success. Because of strong community relations, Karima says the community “helped in fixing the water supply and the electricity. People have a good impression of the school and they want to keep it in good shape.” Ragaa says that the community cares about the teachers and involves them in community events:

When I was just transferred to this OCS, I was absent for some reason. When I came back some of the students’ mothers come to ask about me. Another situation there was a wedding in the community. We were asked to dress the bride and do her make-up. We did it and attended the wedding celebration. Sometimes if one of the parents needs something from ElFashn such as medicine she asks one of us to bring it to her.

The positive impression of the school has not been based solely on good relations, but also on educational results. Thirty-six students graduated from El-Sanaira and joined the preparatory school and are now in the third preparatory.

Like the teachers from El-Sharnouby, Karima, Ragaa, and Nora believe that there are many advantages to working in an OCS, primarily the small size and collaboration with colleagues. Nora said that using the experience of fellow teachers made her transition to the school much smoother. But she was also assisted by the keen insight of the OCS supervisor who knew how important multigrade training was and requested Nora participate in the LearnLink training. When asked about the training, Nora said she had some difficulty implementing the new ideas, but “got benefit from the other teachers’ experience. Also the practical activities helped me to learn more, especially in math.”

Probably the most telling benefit of the training related to the use of corners. When Nora began working in the classroom, she noticed that the previous teacher, Manal, had already developed many corners. But, as Nora pointed out, “the previous teacher had taken the parts she developed when she left, so I had to complete the corners.” Training helped Nora understand how to “complete the corners.”

Another characteristic of the teachers in this school is their close, collaborative work, which Nora says she learned how to do during the training: “We implement the concept of co-teacher which we learned in the training. I work as a co-teacher with the teacher of grades four and five and vice versa.” The concept of co-teacher appears to be a core principle in the success of the multigrade OCS as all three teachers describe it as an integral part of their daily routine. Again, Karima’s description provides insight into how the teachers work as a team to support one another:

We have a timetable, so I may start with the fourth and fifth grades, and on other days, I start with the first three grades. While I am working with the fourth and fifth grades the academic teacher teaches the first three grades and the fourth and fifth academic teacher works with her as a co-teacher. After I finish with the fourth and fifth grades I move to work with the first three grades. Sometimes I may help the academic teacher and vice-versa. For example, I can teach the first grade while she is teaching the second and third.

Teaming does not appear as a planned activity so much as one driven by emerging needs. According to Ragaa, “There are no identified roles or plan for working together. This runs according to the needs of each one of us.”

In addition to corners and co-teaching, teachers said they learned better ways to plan for multiple levels, improved strategies for student assessment, and how to develop low cost instructional aids from locally available materials, and to relate positively with students through gesture and language. What is most interesting in the interview data is Madiha’s response, where she showed a clear understanding of such training concepts as corners and using locally found materials to develop teaching aids. However, she did not attend any LearnLink training because it was only authorized for academic teachers. What became clear during the interviews was the extent of

teacher collaboration. Madiha learned these concepts from her colleague. She says,

I didn't attend LearnLink training programs but my colleague participated. When she came back to the school she started to tell me about what she learned. For example, she told me that we should develop an assessment kit for each student and she started to explain what it was and what does it include? Also, she told me about the corners and how to apply them. I worked with her in developing learning corners and I created a corner for the vocational training. (See Appendix 2 for photographs of learning corners)

What Supervisors Had to Say

Two OCS supervisors were interviewed: Monira who supervises vocational training and Hassan, who supervises academics in grades one through three. Monira is 44 years old and has worked with the OCS for six years. She holds a degree from the secondary education school. Prior to joining the OCS she was a deputy principal in a formal primary school and an economics supervisor. Hassan is a graduate of the technical industrial secondary school. He worked as a principal in a government primary school before joining the OCS four years ago. Both supervisors say they like working in the OCS and make, on average, two visits a month per school for about three hours per visit. Each one supervises ten schools.

Monira said that during her visits she checks records, monitors vocational materials, and checks cleanliness. Although her visits do not appear to focus on instructional improvement, she did indicate she had attended the LearnLink training and learned "new strategies such as peer education." However the most beneficial thing she said she learned was how to improve relationships with teachers. As Monira points out, "the relationship that the trainers built with us let me change my relationship with the teachers to become more friendly."

When Hassan visits the classroom he said he checks attendance and school cleanliness and then he observes a lesson, "I observe if the students are effectively engaged. Then I check the lesson preparation and if the teacher has reached the point in the curriculum sequence. I may give her some feedback on her demonstration, activities, and lesson plan." He also reviews homework and school records. Hassan appears more focused on instruction than Monira. When asked what he had learned in the training he said he learned how to pay more attention to instructional activities and lesson plans. He said, "I learned many things such as multigrade teaching strategies, effective follow-up in the field, and problem solving."

Both supervisors believe that teachers have become more effective and more sure of themselves as a result of the training. Monira says that the teachers "started to use new learning strategies. The most important things they implemented were the assessment kit and learning corners." Hassan points out that "after training the teachers became more self-confident. They are now able to discuss every part of instruction with the supervisors. From my side my role became more guidance than supervisory." When asked what they needed, both indicated they would like more training and Monira specifically requested vocational training.

El-Far OCS, Minia

Minia has 129 OCS located in nine directorates. El-Far OCS is located in El-Far hamlet in the Maghagha Directorate (District). Maghagha has a total area of 705 square Km with a population of 342,339. It has one city, 40 villages and 161 hamlets. It has 147 regular formal schools, 113 considered rural and 34 urban. The average class size is 30.9 students.

El-Far OCS was selected to represent a school in a remote area with strong ties to the community. It is in a regular building in a small hamlet, a 35-minute drive from the governorate's only city, Minia. El-Far sits beside a canal from the Nile River. The school is well equipped with vocational equipment such as a stove, refrigerator, sewing machine, and loom. It has water, electricity, and a clean toilet facility.

Thirty-three girls attend El-Far. Grades two through five are at full capacity with seven students per grade while grade one has five students. Hoda is a 23-year-old graduate of the faculty of science and teaches grades four and five in her first teaching job. Wafan graduated from the faculty of social work and taught in a formal preparatory school for one year before assuming responsibility for grades one through three, three years ago. Abeer is the lead teacher. She has taught vocational education for six years at El-Far, before that she taught in a literacy program for two years.

A Visit to El-Far

We left Minia City and traveled by van along the main road for about 15 minutes when we crossed a Nile irrigation canal and passed through a good-sized village which was a hub of activity as people started the day: men riding donkeys loaded with green plants, tractors driving on the road, a girl carrying mangoes, mounds of mangoes against a wall, and women sitting in stalls with piles of gold melons and watermelons. People of all ages were on the streets sitting or walking alone, or more often, in small groups. An elementary age girl rode a water buffalo down the road and impressively maneuvered it through several turns. Other village people included a blacksmith, a poultry seller, a boy on a bike loaded with used bricks, several men working on a wrought iron door, a small girl carrying a large empty basket, children gathered around a water pump, a man sitting in a shed with goats and sheep, and food stalls where people waited for their orders to be filled. We left the village and followed the canal for another 30 minutes when we arrived at El Farr School, situated along the canal.

The teachers greeted us at the door and invited us in. The school was built in 1994 using the standard OCS design--a stand-alone building consisting of one rectangular room. The classroom had a very neat, clean appearance. Wrapping paper with colorful patterns had been used to cover the walls and cardboard boxes for learning corners materials. Three large purple sheets uniformly tied with red cloth strips divided the room into an academic and vocational area. Students were arranged in two groups with grades four and five in the vocational area and the younger girls seated for an academic lesson. The entire room had been attractively decorated with bold colors and great care put into displays, charts, and teaching materials (see Appendix 2 for photographs of the school).

At the classroom entrance, mounted next to the door, was an attendance pocket chart for students. In a science learning corner was a purple and pink pocket chart used for vocabulary practice. Neatly posted along the ceiling were displays of work rules and instructional posters on a variety of topics. In the Math Learning Corner, there were many creative and very well constructed math place counters made from toothpaste boxes filled with beads. Two pieces of wire could be folded flat for storage or made erect so students could put beads on the appropriate place. There was a teacher-made cardboard clock with moveable hands. Teacher-made items included a felt board for individual letters and boards with colored squares with different letters written on them. On a wall near the vocational area, date seeds had been used to create a chart of the Arabic and English alphabets. When we noticed an especially attractive chart, the teacher brought the four students who had made it. We discovered that many of the materials had been jointly made by teachers and students.

Interviews

Two students, three teachers, and two supervisors were interviewed. Unfortunately, time constraints did not allow for the opportunity to interview any parents. However, teacher and supervisory information suggests a high level of support for the school.

What Students Had to Say

Two students were interviewed. Wafaa is 15 and in the fifth grade. She has three sisters and a younger brother. The two oldest siblings are of school age and attend the formal school. When asked why she didn't attend the formal school, she said that when she was of "school age the tradition was different. So when the OCS started, my family thought it was a good chance for me to be educated." Wafaa's father is a farmer. Naima is 14 and in the fourth grade. Both of her parents are dead so she and one of her brothers live with their grandmother and her other brother lives with an uncle. Both brothers attend the formal school. El-Far is the first school Wafaa and Naima have attended.

Although neither student has attended a formal school, they both felt their school was better because of the small size, the vocational training, and that it was free. They also felt they were getting a better education. Their favorite subjects were reading, writing, and handicrafts. When asked about learning corners, they each had a different perspective. Wafaa said that she "participated in making instructional aids and materials for the corners." Naima said her teachers used the corners to extend the lesson: "After the teacher demonstrates the lesson she gives us assignment to do in the corners." Both girls aspire to attend the formal government schools and graduate from the university.

What Teachers Had to Say

Abeer teaches vocational education and provides leadership to the school. She has taught at El-Far for six years and worked before that in a literacy program for two years. She graduated from the secondary school and is about 30 years old. Wafaa has taught grades one through three at El-Far for three years and taught one year in the formal preparatory school. She holds a university

degree in social work and is 24 years old. The newest teacher is Hoda. She is 23 and holds a university degree in science. She has been at El-Far for one year.

Abeer is the only teacher that received any training about the OCS prior to joining the school. The educational directorate in Miia provided two-weeks of training that focused on the philosophy of the OCS, how to work with girls, and how to relate to the community. Abeer says relations with the community were the most difficult problem she faced: "It was difficult in the beginning to deal with people in the community because I am not from this same hamlet. People did not accept the idea of girls' education. Then we started to tell them about the benefits of the school, that all teachers are female, the school is within the community, and that it is free from any fees." She goes on to say that, in time, the community began to accept the school, "especially because it was in their community. We also received very good support from the one who is responsible for the mosque, El-Imam. He is trusted, people listen to him, and his daughter goes to the school."

She says that now she knows all the parents and has been in most of their homes. Abeer also seems to have good instincts towards parents and is flexible in ways that support both her interest in educating girls and the needs of the families. When asked to describe a younger student, Abeer chose to tell about Zeinab, a nine-year-old girl in grade three. "Zeinab has four sisters and several brothers. She is an excellent student, but her mother doesn't care about her education. She always asks her to stay at home to take care of younger brothers and feed them. I have a problem with absenteeism. So in the summer, I make a schedule for student to be absent for a few days and work in the field so they can earn some money which enables them to buy notebooks and pens." Abeer has developed good relations with parents where everyone's needs appear to be addressed.

Wafaa's experiences with parents echoed those of Abeer. At first, Wafaa said relations were difficult, but now she says "the community appreciates the role of the school in changing students' behavior in addition to learning to read and write. Sometimes people come to us and ask us to read some documents because they cannot read. So the community recognizes the value of education." Now the school faces a "high demand of applications annually for the OCS." Hoda's experience with the community is similar. She says that the community now considers the school as their own. "They are interested in the school and willing to make their children's future better."

Wafan and Hoda both attended the LearnLink training and described the results as very beneficial. "One of the important things I have learned," says Wafaa, "was how to deal with children who have difficulties in learning. I learned how to work with other teachers to manage the class. We also learned about corners which helped us to make the students more involved." Hoda shared similar sentiments: "I learned how to make corners and link the teaching aids to the curriculum. I learned how to make lesson plans with specific objectives for each grade. I also learned how to work with other teachers." When Hoda was asked how useful the corners had been, she said they were more useful for grades one, two, and three because there were so few materials available for grades four and *five*. Her greatest need, she pointed out, was for training in multigrade strategies for grades four and five. Interestingly, this interview was conducted prior to the implementation of fourth and fifth grade training. Wafaa said she would like more training

in how to use resources in the local environment.

All three teachers seemed very pleased with the successes in their school and with community relations. They felt the training had been beneficial and visits to the school demonstrated a high level of visual displays and activities that grew out of the training program.

What Supervisors Had to Say

Ramadan, who supervises vocational education, and Mabmoud, who supervises academics, have received the LearnLink Training of Trainers. In addition, Ramadan participated in the DT2 US-based multigrade training program. He has supervised OCS for five years and the formal primary school for five years. Mabmoud began work with the OCS in 1997 and prior to that, he was a principal in a government primary school for three years. Thus both men have intimate knowledge of the OCS and the formal government schools.

Ramadan supervises 18 OCS, the largest number of any of the supervisors interviewed. He says he visits each school once a month. During his visits he “usually starts by looking at the lesson plans and student notebooks. I also look at the vocational products and inquire into community relations. For example, the students can bring the milk and make yogurt or cheese in the school for their families. They can also bring family clothes to iron.” To help the vocational teacher improve her skills Ramadan says he “practices teaching with the teacher and considers such a day as a training day.” Mabmoud also says that he demonstrates lessons and has the teacher work as a co-teacher: “This is to give her a model for good practice. Through this process I can also assess the students. I try to conduct a one-day training for the teachers.”

Supervisors were asked to describe how the training had influenced their practices and those of teachers. Mahmoud pointed out that “it was the first time to have training on OCS when I received the TOT training. It was good to know about the five themes for working in the OCS [planning, participation, cooperation, application, and evaluation].” He said he learned new teaching strategies and learned how to involve students and “that many changes have taken place after the teachers received the training.” Ramadan also says that LearnLink training was the first he had received dedicated to the OCS and that he used what he learned to provide training to teachers:

I attended the initial training for supervisors. Then I received TOT and field observation training. After the training we conducted training for teachers during the market day as a trial to transfer the experience. They [teachers] made a rapid response to implement what they learned.

Mahmoud has taken the training a step further by inviting teachers from other OCS to visit El-Far because the El-Far teachers, he believes, have worked cooperatively to successfully apply what they have learned in training. However, he points out that the teachers could use more raw materials and that two of them do not have contracts. This is a worry for many supervisors because teachers often leave for the formal schools when they are offered a contract and often for a higher salary. Ramadan says he would like to see more vocational training for teachers; especially in ways that would help them “link the academic curriculum to the vocational one.”

What Was Learned

Data from the case studies provides insight on the transference of LearnLink training to the school setting. However, they only provide specific information on the three schools studied. But taken collectively with evaluation results from the Phase I and Phase II training, they provide reliable information on how the training has been viewed and used by supervisors and teachers. Additionally, the case studies provide useful information on important school attributes that help make these schools successful and therefore provide information that may have implications for other schools and future training.

Each school followed the principles and design of the OCS established by the MOE. ElSanaira and El-Far were housed in permanent buildings while El-Sharnouby was in a temporary space waiting for the construction of a new school. Everyone interviewed believed their school was a good place for girls because they were learning and they had caring, dedicated teachers. All three schools had excellent community relations and support. In addition, everyone interviewed held high expectations for students. Students and parents held visions of advanced schooling, and, in most cases, through the university level. But the schools had not always had such high levels of support. Teachers worked hard to establish relations with the community and their efforts paid off in benefits for all concerned.

In each school there was a lead teacher living in the community and actively engaged in local life. This engagement was viewed by the community as contributing to community well being. Madiha from El-Sharnouby visited homes and told parents how the school would benefit their children. Karima started El-Sanaira in her home and was a member of the community council. Abeer, from El-Far, developed support with the local Imam from the mosque who was instrumental in building support for the school. Teachers worked hard to help make the schools an integral part of their respective communities and to create relationships of trust and support.

Although one cannot claim that the training led to these positive relations, **it** is safe to say it helped to deepen and sustain them. For example, when Monira says she learned to be friendlier to teachers because of the positive ways the LearnLink Trainers treated her, she is describing an important outcome of the training. The training was designed to model positive strategies for building relationships and to counteract the prevailing status hierarchy of the educational system, which tends to create counterproductive relationships with subordinates. Traditional supervisors tend to be inflexible and authoritarian in carrying out their roles; with the LearnLink model, supervisors learned to be more flexible and facilitative in their relationships with teachers.

In a similar manner, teachers traditionally tend to view their role as authoritarian in relation to students. The training sought to change this hierarchical way of relating through democratic principles of active participation and collaboration in all aspects of the training. What Monira described was the intended result of the training activities. Further, by training supervisors and teachers together, greater opportunity emerged to develop relationships built on experience and trust rather than on lines of authority.

In every school, teacher and student interactions were positive and active. Each classroom used learning corners in ways that fit the needs of students and teachers. In some cases the corners

served as an extension of the lesson and in other cases students helped make the corners, thus engaging them through responsible action. Before the training, corners did not exist in most of the OCS in the governorate. The schools were also well organized and visually attractive. Even in El-Sharnouby's temporary building, teachers and students worked to make their classroom attractive. Moreover, the abundance of posters, displays, and other teacher-made materials attested to the creativity of the teachers.

Interviews with students demonstrated they had a clear understanding of how their classrooms operated. They were able to articulate the structure of the day, regardless of their age or grade. They also held very positive views of their schools, especially when they contrasted them to the formal government schools where teachers were portrayed as indifferent toward students. The school was viewed as an important part of their lives and there were suggestions that without the OSC many of the girls would not have been receiving an education.

Supervisory practices appeared to have changes because of the training. Supervisors from Minia said they now used some school visitation days for training where they modeled instruction, monitored student understanding, and provided corrective feedback to teachers. In Beni-Suef, supervisors said that teachers had become more confident after the training and were now able to talk openly about their practice. Nadia, from Beni-Suef, believes that students from the OCS outperform those from the formal government school and suggests similar training would help the formal schools improve.

From all accounts, the training has proven beneficial to supervisors and teachers in a myriad of ways. However, it needs to be kept in mind that the teachers and supervisors from the OCS were poised and ready for training. Teachers were waiting for an opportunity to expand what they were doing and build on what they knew worked. Ragaa, from Beni-Suef, sums up their readiness when she said, "some of these strategies have already been used by the students before the training such as peer learning and cooperative group work. They are used to helping each other." The training was designed to build upon the close relations that generally exist in multigrade settings like the OCS. Teachers instinctively relied on these relations, but felt they had a mandate to manage the class in the teacher centered manner of the formal primary schools. In order to manage their classrooms in a more democratic fashion, they required MOE authorization and training to allow students greater responsibility and voice in the classroom. LearnLink's collaborative relationship with the MOE provided both the authorization and the training.

Final Teacher-Supervisor Seminars

As part of final project closeout activities, LearnLink organized three teacher/supervisor seminars that were held after all teachers had been observed toward the end of Phase II (see Figure 1, stage 11). This activity was similar to the seminars conducted at the end of the Phase I training, but because they occurred so close to the end of the LearnLink Project, they were organized as both a seminar for sharing teaching practices and as a final data collection and dissemination event. Seminars were held in each governorate and organized around three objectives:

1. Exchange information and field experiences about best practices in several areas: teaching activities, materials, lesson plans, relationships with supervisors, relationships with local community, classroom management, classroom organization, teaching and learning strategies, and relationships with colleagues.
2. Identify and select the best practices for display during the final policy conference in Cairo.
3. Develop recommendations for sustaining training and improvement efforts of the OCS and enhancing work in OCS.

One hundred and seventy one teachers from each of the three governorates and a sample of supervisors attended (Table 8). Teachers came early and set up displays of their teaching aids and the promising practices they had developed.

These were photographed and a sample from each governorate selected for use in the final LearnLink Final Policy Conference scheduled for November in Cairo. In addition, teachers worked together to write up and share ideas about promising practices and their recommendations for ways to sustain the training efforts begun by LearnLink. Teachers were encouraged to share recommendations covering policy, administration and management, relationships with local communities, curriculum, curriculum implementation, class organization and management, teaching and learning strategies, and relationships with colleagues and supervisors. Supervisors served as facilitators (See Appendix C for photos taken during the seminars).

Table 8. Participants Numbers for Final Teacher/Supervisor Seminars

Governorate	Date	Session	Participants
Behaira	Oct. 4-5	1	56 teachers, 8 supervisors
		2	56 teachers, 8 supervisors
		3	56 teachers, 8 supervisors
		4	56 teachers, 9 supervisors
Beni-Suef	Oct. 11 - 12	1	50 teachers, 6 supervisors
		2	50 teachers, 6 supervisors
		3	50 teachers, 6 supervisors
		4	50 teachers, 6 supervisors
Minia	Oct. 17	1	85 teachers, 13 supervisors
		2	81 teachers, 14 supervisors
Totals			596 teachers, 84 supervisors

Individually, teachers wrote responses to two questions and then met in small groups and shared their ideas. A summary of the data for each group was written on chart pack paper and presented to the entire group for that session. Thus, 10 group presentations were given across the three governorates. Data from these presentations was collected and analyzed by LearnLink staff. The results have been presented below along with each question.

Question 1: What suggestions do you have for enhancing the work in the OCS?

Teachers made numerous suggestions that fell into nine general categories. Where specific recommendations were made, they were grouped under the appropriate heading. For example, for Category One, teachers gave four suggestions that represented ways their work could be improved. However, for Category Three, no specific suggestions were written.

1. Curriculum resources

- Provide new multigrade curriculum for grades four and five similar to that developed for grades one through three
- Supply copies of each textbook
- Ensure each teacher has a copy of the teacher's guides for each subject
- Integrate curriculum between subjects, including Vocational Education

2. Curriculum design

- Include more activities for each lesson
- Include Pictures that reflect the context of the OCS
- Provide non-consumable textbooks
- Make the textbooks easier to read with larger fonts, especially for younger children.
- Place instructional activities in a separate book.

3. Improve relationships with colleagues, students, and the community

4. Budget needs

- Provide a budget for instructional aid materials
- Ensure equity of funding between Vocational Education and the academic subjects (Vocational budget is much higher)
- Pay teachers the full-day incentive provided in the formal government schools
- Create and fund a school and class budget
- Pay teachers the examination bonus like they do in the formal government schools

5. Create incentives for teachers and students

6. Conduct teacher - supervisor seminars

- Across schools
- Monthly
- Exhibitions of work

7. Strengthen connections to the community

- Use local knowledge in the school curriculum
- Build positive relations with the community by using media to inform the community about the OCS or hold regular meetings
- Provide a volunteer community coordinator

8. Instructional materials development

- Allow students to help make instructional materials
- Provide for more library books

9. Facilities

- Replace temporary schools
- Provide electrical equipment for all schools
- Place a fence around the schoolyard
- Create more vocational storage
- Use roof of school for storage
- Plant trees

Nearly all the ideas presented by teachers represented ways to enhance or improve the quality of learning in the OCS. Moreover, the suggestions reflect the concepts and ideas learned in the training program. In other words, the repertoire of teacher ideas has expanded dramatically from the baseline data collected during the OCS Assessment Study. Teachers have become more active and articulate about their needs. This can be seen in the promising practices displayed during the seminars and the recommendations presented for improvement. For example, early in the project, teachers seldom expressed a need to develop instructional aids or deepen relationships with the community. Such ideas were not encouraged or expressed. By having the training sanctioned by the MOE and including such ideas in the training, teachers seemed to blossom in their motivation and creativity.

Question 2. What ideas do you have for benefiting from the training program?

Like responses for Question 1, *teachers voiced a strong desire to improve the quality of learning*, but in this question the focus was on the use of training. Teachers appeared emphatic that everyone working with the OCS should receive training. Fifty-eight percent of all comments reflected a desire for more training for themselves. The remaining 42% of responses suggested ways to improve training programs as well as who should receive training in the future:

- Increase the training period or cycle
- Provide similar training for all new curriculum
- Provide training for all vocational teachers
- Ensure all new supervisors are trained
- Provide more training for grades 4 and 5 where there is more curriculum to teach than in the lower grades
- Ensure all new teachers are trained
- Develop training programs for technology, especially computers

Concluding Comments

The diversity, quality, and quantity of promising practices displayed during each governorate seminar suggests that teachers transferred many of the concepts learned during training to actual classroom practice. Moreover, teachers demonstrated high levels of motivation and a sense of pride in their accomplishments. During walkthroughs of the teacher displays, one could observe teachers talking and exchanging ideas, copying down ideas for use in their classrooms, and seeking audience with anyone interested in learning about their display. Even supervisors demonstrated enthusiasm for the teachers and classrooms from their directorate.

At the end of each session, LearnLink and the MOE presented each teacher with a certificate of accomplishment for their participation in the Phase I and Phase II training. In addition, each school was given ten books for their libraries. From the pool of participants, three teachers, six students, and six supervisors were nominated by LearnLink Trainers and TOT Supervisors to attend the final policy conference in Cairo. Nominations were based on the teaching materials created, active participation in all training activities, and demonstrated application of training concepts and ideas into the classroom. An equal number of participants were selected from each governorate.

Close-Out Policy Conference: Project Outcomes and Recommendations

On November 5, 2000, LearnLink, in collaboration with USAID and the MOE, sponsored a final closeout conference for the Training Advisory Council, constituent policy makers, USAID representatives, and guests working in the field of teacher training. The purpose of the conference was to focus the attention of the policy makers within the MOE on ways to continue training activities initiated by LearnLink and to sustain and improve them for the future. To achieve this purpose, the conference sponsors sought to achieve four interrelated objectives:

1. Learn about LearnLink accomplishments and the promising practices for improving OCS learning that emerged from the training and from classroom practice.
2. Review recommendations from the OCS study and LearnLink activities and apply them to future training activities.
3. Develop ideas for how LearnLink activities might enhance formal primary school teaching.
4. Develop recommendations and action plans for sustaining LearnLink accomplishments for continuous improvement of OCS teaching and learning.

Although the conference focused primarily on policy makers, a key element and strategy for engagement involved students, teachers, and supervisors presenting training outcomes from their point of view. Six students, three teachers, and six supervisors attended the conference as their colleagues' representatives. They brought a diverse sample of their work including learning corners, teacher and student made instructional materials, lesson plans, games, and photographs.

They set up displays along with LearnLink staff so that policy makers and conference participants could learn how training had been transferred into classroom practice.

Conference activities were divided into two parts. Part I focused on setting the stage, where participants learned about project activities and outcomes through a variety of mechanisms such as focus group interviews, visiting learning corners, talking with supervisors, teachers, and students, and presentations. During Part II, participants worked in groups to apply what they had learned in developing recommendations and action plans for sustaining LearnLink work.

Part I. Setting the Stage

This one-day event was attended by:

- Ms. Sally Patton, Director for Education and Training, USAID, Egypt
- Ms. Fayza Khalil, Undersecretary for Basic Education, MOE, Egypt
- Ms. Linda Leonard, VP, AED, Washington, D.C.
- Undersecretaries from Behaira, Beni-Suef, and Minia Governorates
- Mr. Samir Ibrahim, OCS General Director, MOE, Egypt
- Guests from the New Girl's Schools Project and other USALD project staff
- OCS Directors from Behaira, Beni-Suef, and Miiia Governorates
- OCS supervisors (6), teachers (3), and students (6)
- LearnLink staff and training team

LearnLink Chief of Party, Dr. Bruce Miller welcomed the attendees and thanked them for participating in LearnLink's final conference focusing on learning what the project has accomplished and developing plans for what actions will be taken next.

Undersecretary Ms. Fayza Khalil thanked all the people involved especially Ms. Taissir Hosam El-Din of LearnLink for her effective political skills in bringing both American and Egyptian parties to mutual understanding. She explained the value of the project in addressing the problems of dropouts and expressed hope that out of the conference will come plans to help guide future efforts in the same direction as the LearnLink training activities.

Ms. Sally Patton gave a brief talk on USAID supported educational activities and mentioned the need to address the training needs of the OCS vocational teachers. She suggested that future USAID efforts will seek to address this need.

The LearnLink Chief of Party, Dr. Bruce Miller, presented an overview of the major outcomes of the LearnLink Task Order. These have been organized and presented in Table 9.

Table 9: LearnLink Deliverables Based on the August 2000 Rescoped Task Order

Deliverable	Description
1. Provide Technical Assistance (TA) to MOE for developing teachers' guides for grades 1-3.	LearnLink provide TA to the MOE's Curriculum Center for the development of teachers' guides to accompany the student multigrade textbooks funded by UNICEF. This was completed on August 30, 1998.
2. Develop Multigrade Teacher Training Resource Manual	This manual was completed and incorporated into the first training activities in October 1999 and field-tested and revised during training Phase I and II.
3. Provide survival skills training for PLAN School facilitators,	Five slum area schools were developed in collaboration with the MOE and PLAN international. LearnLink designed and implemented a survival skills training for the facilitators hired from the local communities. Completed during the summer of 1998.
4. Develop staff development program for teachers and supervisors that includes both a Training of Trainers activity and in-service training for all OCS teachers in the three target governorates.	The survival skills training was a precursor to this larger scope of work. Materials for Phase I were completed and field-tested in October 1999. Phase I was completed in March 2000. Phase II materials completed in June 2000 and training completed in September. All materials revised and finalized in December 2000.
5. Develop self-instructional materials.	Work was completed in August 1998 at the curriculum center. Materials revised into corners kits and used in Phase I and Phase II training. A complete set of kits delivered to each target governorate and to the MOE's OCS Division.
6. Develop an improved student assessment system.	Teacher's manuals for student assessment for grades 1-3 and 4-5 completed along with a student tracking record. These materials were given to each teacher and supervisor during Phase I and II training.
7. Conduct an assessment of the OCS in the three governorates.	The assessment study was completed in July of 1999 and the final report submitted to the MOE in December 2000.
8. A final version of all training materials will be handed over the MOE.	A final set of all materials was submitted to the First Undersecretary in December 2000. Each set of materials was accompanied with a computer disk containing an electronic copy.

The following training materials were submitted to the First Undersecretary of the MOE as per deliverable number 8, above:

Volume I: Basics for working in the OCS (Phase I Training)

- Multigrade Teacher Training Resource Manual
- Training manual of teaching strategies organized around five themes of successful teaching practice: Planning, Sharing, Cooperation, Application, and Evaluation. Included in this manual was the Teacher's Observation Format, Teacher's Assessment Manual for Grades One, Two, and Three and the Summary of Students' Comprehensive Evaluation Report.

Volume II: Strategies of Teaching and Learning subject matter in Grades Four and Five in the OCS (Phase II)

- Multigrade Teacher Training Resource Manual

- Basic Principles of Teaching Grades Four and Five in the OCS
- Strategies of teaching and Learning Subject matter in Grades Four and Five: Arabic, Math, Science, and Social Studies.
- Teacher’s Assessment Manual for Grades Four and Five Students
- Summary of Students’ Comprehensive Evaluation Report

Model Learning Corner Kits

- Math Corner: The Math Corner represented a “General Math Corner” which functioned both as a place to store math equipment and a section of the classroom where students would practice, improve, and apply math skills at different levels. It included activities to increase students’ skill in counting, addition, subtraction, and multiplication computation, working with simple fractions, recognizing and creating geometric shapes, and math problem-solving. Some activities were designated by grade level. (See Appendix E for photographs).
- Arabic Corner: The Arabic Corner was a demonstration of how a theme, in this case the popular folk character Goha, can be used for practice of language skills and development of appreciation for language use and folklore. The corner included a handout with Goha stories, books of Goha stories in Arabic and English, and illustrations of well-known stories. After completing an assignment at the appropriate grade level, students selected supplemental activities such as creating Goha puppets and presenting a puppet show, retelling Goha stories to their classmates, and drawing illustrations for Goha stories. (See Appendix E for photographs).
- Social Studies Corner: The Social Studies Corner was developed to demonstrate how a particular set of skills, such as the cardinal directions, could be the focus of a range of activities at different grade levels. The activities were designed to engage students in practice using direction by reading maps, using direction in a game, and labeling direction on a map compass. (See Appendix E for photographs).
- Science Corner (Magnetism, Sound, and Animals): The Science Corner activities demonstrated how a OCS teacher can extend and supplement content presented in the textbook through science activities in a learning corner. The copies of magnetism and sound are presented in fourth and fifth grade science textbooks. Some of the lessons’ experiments on activity cards in this corner were taken directly from those texts. The science area focused on animals, which occurs at several grade levels in the national curriculum; and lends itself to an interdisciplinary, integrated corner that links various subject areas. Some activities, e.g., classification of animal types, were taken directly from the content in the fourth or fifth grade science textbook. (See Appendix E for photographs).

Group Interview: OCS Teachers, Supervisors and Students

Dr. Bruce Miller, with translation help from Ms. Taissir, conducted a group interview with OCS students, teachers, and supervisors. The following summarizes the key points made by participants during the interview (See Appendix D for photographs of interviews):

- The training has helped make the goals of one-classroom schools more understandable.
- Interaction between the school and the community has improved.
- Student-teacher relationships have become more positive and intimate
- Student learning has become more interactive and student-centered and less traditional.
- Relationships between teachers and supervisors have greatly improved.

Reflections on LearnLink Training by Mr. Samir Ibrahim, OCS General Director,

Mr. Samir praised the outcomes of the LearnLink Project and thanked USAID and AED for their help and assistance in making the project possible. He also thanked the Chief of Party, Dr. Bruce A. Miller, and the LearnLink staff for their role in successfully carrying out the various training activities. Lastly, he thanked the training team under the supervision of Dr. Hussein El-Dreeny.

Mr. Samir assured the participants that the MOE would maintain and improve the OCS training infrastructure using the materials and resources developed in collaboration with LearnLink. Mr. Samir said that he had been in planning discussions with Dr. Mona Zikri from USAID and with the LearnLink Chief of Party, Dr. Miller. The discussion had focused on developing a plan to field-test the cadre of supervisors trained by LearnLink. Field-testing would likely be carried out in the governorate of Fayoum where the New School's Project was being implemented.

The field tests would involve replicating the LearnLink design used in the Phase I training with all OCS teachers in Fayoum. OCS supervisors from Beni-Suef and the MOE's Central Office who received the TOT and co-trained with LearnLink trainers would conduct the field test.

Introduction to Promising Practices

An exhibition of instructional teaching materials made by students and teachers from the three governorates was displayed. The materials were made from free or inexpensive resources from local community environments. A video film of typical OCS daily activities was continuously played in order to give those who had not visited a OCS an opportunity to see what they looked like. Dr. Miller made a comment *"in the beginning of our training OCS teachers didn't have very positive attitude towards themselves' but now they are more self-confidence because they realize how significant and creative their work is~"* (See Appendix D for photographs of teacher and student developed materials and displays).

Part II. Sustaining and Enhancing OCS Training

The participants were organized into three groups: 1) a policy makers' group, 2) the trainers' group, and 3) a supervisor and teachers' group. Based on the information derived from the

Assessment Study, recommendations from the closeout teachers' and supervisors' seminars, project evaluation data, and their own experience, each group was to outline a plan for sustaining OCS improvement activities. Each group would focus on their areas of expertise and indicate what they would need from each of the groups. For example, if the teacher and supervisor group felt more training was needed, what would be required in the area of policy? (See Appendix D for photographs of group discussions).

Each group developed plans for sustaining and enhancing OCS training and presented their results to the other groups for discussion and recommendations. Final plans were revised, typed, and presented to the MOE for consideration. A brief summary of each plan follows:

Policy Makers

The policy and decision-making group represented both the governorate and national level of policy. Moreover, this group also included representatives from USAID. This group raised concerns about the discontinuity between national and governorate level decision-making. Those from the governorate level indicated that decisions needed to be made closer to where the work would be carried out. They said there needed to be "more involvement of the educational directorates in decisions." One example they cited was the national policy on textbooks, which required that each child be given a consumable textbook for each subject. If textbooks could be reused, the savings could be used to cover training costs. A second area needing attention was the inadequacy of many temporary OCS buildings. The group strongly recommended eliminating the use of temporary facilities and replacing them with the new one-building design. Lastly, this group concurred with Mr. Samir's efforts to conduct training in Fayoum as a mechanism for field testing the OCS training infrastructure using the LearnLink materials and design.

The Trainers

LearnLink trainers and TOT supervisors focused their attention on further developing the performance of those trained through LearnLink and in the United States through DT2. This group voiced concern that if the skills they had learned were not practiced, they would be lost. Secondly, this group felt it was important to develop plans for training new trainers as many of those who received TOT were near retirement age.

Supervisors and Teachers

This group felt there were three areas needing to be addressed in future training plans. First, the raw materials required for making instructional materials should be provided during training so teachers can make instructional aids during the workshops and use them immediately upon returning to the classroom. Secondly, materials that cannot be made but that are required for meeting curriculum objectives need to be made available for

instruction. For example, providing magnets, measuring instruments, and other science materials are necessary if teachers are to implement the existing curriculum. Lastly, teachers need resources on instructional strategies such as self-directed learning, active learning, and cooperative learning if they are to practice and expand what they have learned during training.

Closure

Dr. Bruce Miller summarized the conference recommendations:

- Increase availability of multigrade instructional resources and materials
- Ensure schools have necessary equipment and books
- Continue to provide in-service training for teachers and supervisors
- Make efforts to address students' attendance problems

CONCLUDING COMMENTS

One of the primary difficulties of externally funded projects, such as the LearnLink training, is the difficulty of sustaining the work once the dollar support has been withdrawn. Conference participants voiced concern about this problem. The Fayoum training had been tentatively scheduled for January 2001 during the students' mid-year vacation. LearnLink had met with the First Undersecretary and the Undersecretary for Basic Education and received their support in carrying out the field-testing activity. A financial review at the end of the LearnLink Project indicated enough money would be left from the project to fund a portion of the field-testing. This would include the production of all materials, costs for the training site, and the consultant fees for LearnLink trainers to provide technical assistance during the training. This would leave travel, per-diem, and MOE staff time to be covered by the OCS Division. The critically important component of field-testing will be the organization, logistics, and application of what the MOE had learned and practiced under the direct supervision of the LearnLink trainers. Successful replication of the LearnLink training design would demonstrate the transference of training capacity. It would also provide evidence that the infrastructure capacity developed with the technical support of the LearnLink Project could operate independent of outside support. What remains to be seen is whether the MOE has the will to act in the face of a myriad of competing demands initiated within the MOE as well as those from donor agencies such as USAID, UNICEF, and Canadian Educational Development Agency.

At the time of project closeout on December 30t~~, a decision had been made by USAID to reallocate the unused portion of the LearnLink budget into a direct grant to the MOE to carryout out the field tests. Although this field-testing concept had not been part of the original task order, its emergence as an important step, not only in applying what had been learned, but also as a crucial measure of the MOE's will to sustain what had been learned. Too often, the issue of sustainability receives scant attention in relation to the up front efforts of project startup and implementation. It is to USAID's credit that the unexpended portion of the LearnLink budget will be allocated to testing the MOE's will to sustain the collaborative development and training work of the LearnLink Project and the Division of One Classroom Schools.

APPENDIX A

Training Design Narrative by Development Stage

Activities Prior to the October 1st Start-Up

MOE Review: Prior to the initiation of Phase I and II, the OCS Training design was carefully reviewed by the LearnLink MOE counterpart, the One Classroom School Directorate of the Ministry of Education.

Needs Assessment: OCS teacher and supervisory needs were collected from a variety of sources and used as a basis for training content. The OCS assessment study served both as a base-line measure and as a primary source for identifying needs to be addressed through training. In addition, data was collected through supervisor focus groups and through an analysis of supervisory observation reports of teaching.

Completion of the *Multigrade Teacher Training Resource Manual* As per the LearnLink Task Order, a training manual was developed and field-tested throughout the various training events.

Prototype Supplemental Learning Aids: Prototype multigrade learning aids have been prepared and delivered to CCIMD during the summer of 1998. These products were incorporated into all training activities.

Training Design Stages

Phase I

Stage 1: Policy Advisory Retreat. Project staff met regularly with key OCS policy makers to review the training framework and seek their ideas for improving the design. Three such retreats were conducted during the project

Stage 2: Training Materials Development. Lead trainers participated in a week-long workshop where they worked with US-based consultants in the creation of training materials used in Phase I training.

Stage 3: Training of Trainers (TOT). This is an intense program designed to train supervisors as OCS teacher trainers. Those chosen for training were selected because of their positive performance during previous LearnLink training activities. Each supervisor trainer received a trainer's kit that included all the materials they needed for their roles as trainers.

Stage 4: OCS Teacher Training. TOT participants and mentor lead trainers conducted OCS teacher training in each governorate. The morning session focused on teachers and the afternoon

focused on trainers debriefing and planning for the next day's teacher training. Training content was based on OCS base-line assessment data, including teacher and supervisor feedback from a variety of qualitative sources. Training focused on active teaching strategies that can be used in both multigrade and single grade settings. Teachers were trained in groups of approximately 55 and conducted in simultaneous rounds of about 400 teachers.

Supervisor **Orientation:** TOT participants and trainers (#4) conducted an orientation for OCS supervisors on the OCS training content. An observation framework was presented along with a format for taking data during observations in order to support the implementation of new OCS teaching. Supervisors learned about positive ways to provide supportive environments and conduct problem solving with teachers.

Stage 5: Supervisory **Field Observations and Feedback Seminars.** During the post-training period, LearnLink lead trainers and TOT supervisors observed teachers in their classrooms and conducted feedback seminars to share results and problem-solve ways to improve the quality of learning. These served to initiate teacher clusters.

Phase II

Stage 6: Workshop for Developing Training Materials. In collaboration with the LearnLink lead trainers, the OCS Supervisor trainers designed the next round of training activities and developed the necessary materials.

Stage 7: **TOT for Content Areas Supervisors:** A sample of content area supervisors from each governorate were trained as trainers and co-trained with LearnLink lead trainers during stages 8 and 9.

Stage 8: Content Area Supervisor Training. A sample of OCS content area supervisors from each governorate was trained on multigrade teaching strategies and supervisory skills for facilitating school improvement.

Stage 9: OCS Teacher Review and Content Focused Training. The second phase of OCS teacher training reviewed previous training and introduced each content area strategies for grades four and five. Training on developing instructional aids that built on previous workshops and experience was offered.

Stage 10: Field Observation and Feedback: Field observations were followed by feedback seminars in which teachers and supervisors gathered together for a day to share observation results and explore ways of improving the quality of learning.

Stage 11: Dissemination Conferences/Teacher Seminars. A one-day concluding conference was held in each governorate to share promising practices with supervisors and teachers.

Final Dissemination Policy Conference: A one-day policy conference was held for the Training Advisory Council and key policy makers from each governorate and the MOE.