

Building Long-Term Collaborations for the Improvement of Primary Education in Ethiopia

US Agency for International Development Project

Award No. 663-A-00-00-00352-00

FINAL REPORT

June 21, 2005

**James L. Hoot, Ph.D.
Research Foundation of State University of New York on behalf of
State University of New York at Buffalo
525 Baldy Hall
Buffalo, NY 14260**

**Phone: 716-645-2455
E-mail: jhoot@buffalo.edu**

Executive Summary

This project was designed to explore the potential of educational computer technology to build long-term professional collaborations among primary grade professors, teachers and students. Computer laboratories were established in three diverse primary classrooms—a government school, a public school, and in a rural location. Specialized training was provided to project personnel. In addition, project partners in Ethiopia have been working closely with a primary school in Buffalo, New York via computer technology. Beginning in the fall, primary classrooms in Ethiopia and the USA (Buffalo, Florida and possibly Alaska) will be joined by primary teachers and children in India, Jordan, and Costa Rica.

Background

This project began out of a number of concerns of the Ministry of Education in Ethiopia. Some of these concerns included: developing national leadership in the area of primary education, building stronger linkages between teacher training and primary classrooms, addressing the issue of gender equity, addressing problems of educating children in rural areas, demonstration of alternatives to didactic education which involves group instruction and problem-solving foci, developing a cadre of primary grade teaching professionals who can overcome years of intellectual isolation by accessing the world of knowledge through emerging technology.

Program Objectives

In order to respond to MOE's above concerns and concerns of Ethiopian colleagues, the following objectives were established for this project:

1. Develop national leaders in the area of primary education
2. Develop computer laboratories in primary schools
3. Train primary teachers in educational technology use
4. Develop collaborations among primary lab schools
5. Assist in developing school/community relationships via technology
6. Develop technology mentoring programs with children
7. Use technology as a vehicle for building long-term collaborative relationships between teacher training institutions and primary schools.
8. Use technology to build coalitions with teachers and children in this project with teachers and children in our global community

9. Project dissemination

10. Continuation

Accomplishments

The emerging purpose of this project was to explore the potential of computer technology to link project partners (teacher training institutions and primary schools) with colleagues throughout the world. To increase the likelihood that the project would be successful and that it would continue after funding ended, the project has invested heavily in human resources. The University at Buffalo has a long history of expertise in the area of technology applications with primary children. Therefore, one of the major successes of the project was to bring colleagues from Addis Ababa University (AAU) to Buffalo to see the potential of the project goals first-hand and to build strong world alliances through technology while in the States. In this pursuit, the project enabled 10 colleagues from Addis Ababa University (including a President, Deans, Chairs, and Faculty members) to come to Buffalo for planning and specialized training. These visits helped develop very productive professional friendships between colleagues at AAU and the University at Buffalo (UB). Through such relationships, an AAU faculty member (Demeke Gesesse) and an AAU female student (Selamawit Tadesse) who showed much promise for leadership in early education were selected to come to Buffalo for graduate degrees specializing in Early Childhood Education with an emphasis upon primary education technology applications. Demeke completed his Master's degree in 2003 and also engaged in doctoral coursework (including passing his Research Analysis Exam). Problems with Demeke's visa required that he return to Addis for 2 years before completion of his degree. Selamawit Tadesse has completed all doctoral coursework and will begin here dissertation in the fall.

In addition to coursework, both Demeke and Selamawit have been very active in the Association for Childhood Education International. Both have had several presentations accepted regarding our project and last year Demeke completed application for an Ethiopian national chapter of ACEI. It is hoped that this organization will develop and assist teachers in Ethiopia in sharing problems, hopes, dreams and ideas with among themselves as well as with global colleagues. ACEI is the oldest professional organization for primary grade teachers in the world and has chapters in 20 countries. In addition to annual conferences, ACEI provides numerous professional publications designed to share world knowledge with global colleagues. In addition, application for seed funding to host an ACEI conference in Addis was approved. Finally, because of her leadership in this organization, last year at the annual conference Selamawit was selected as the 2004 recipient of the Elizabeth Braithwaite Student Leadership Award. This major award is designed to recognize a student member of this international organization who has demonstrated outstanding leadership potential. This award is highly competitive and reaffirmed that our investment in Selamawit was a good one. She will become a major leader in the field in Ethiopia upon her return.

Secondly, to achieve our goal of demonstrating the potential of computers for opening the world of knowledge to primary teachers and their students, computer laboratories were established in 3 primary schools. Since we wanted to show that this model would work with all primary schools, rather than just those with more funding, we selected diverse primary school sites for our project. Tsehay Chora, a government school, was selected because of its close proximity to AAU and because Tsehay Chora staff were highly supportive of the project. It was further felt that this school could easily become a convenient internship site for the AAU teacher training program and developing technology program there. Assai, a public school, was selected because of a highly committed staff and a principal with close ties to AAU. Finally, since the majority of the population in the country lives in rural areas, we wanted to demonstrate that our technology model could be adapted to a rural school and a non-formal school in Dimtu in the Jimma region. After selecting these sites, computer laboratories were established in both Assai and Tsehay Chora and during the final year of the project we began developing the site in Dimtu. Our fourth laboratory school is the King Center Charter School in Buffalo, New York, USA. This primary school has extensive distance learning state-of-the-art facilities. The 3 Ethiopian lab schools have been in close collaboration with children and teachers of the King Center Charter School and have begun cross-cultural collaborative projects via internet.

Thirdly, a staff member of UB's Center for Applied Technology in Education (CATE) provided on-site training to key project personnel from the 3 lab sites. Training was limited to software with primary education implications. In addition a key on-site technology support person was identified at each lab site. This person worked closely with CATE and served as a PORTAL for information for respective schools.

Fourth, through the project, close professional relationships were established among the 3 laboratory sites. For example, Assai primary school has agreed to provide internet access to Tsehay Chora for our continuation of our project which begins in the fall.

Fifth, plans are completed for extending technology to the local communities in several ways. For example, computer labs will be used by children working in team to develop web sites for local businesses. In addition, lab sites have begun exploring how students can generate income for the school through technology (e.g. wedding invitations, business cards, etc.). Moreover, in the fall, lab sites will provide introduction mini-courses to interested community members on topics such as word processing, using the Internet, Excel, etc..

Sixth, a group of "pilot" teachers and their students have been identified and training has been provided to this group. Students in the pilot group include equal numbers of girls and boys. These children who have been provided with the training over the past 2 years are being used as mentors to assist their colleagues in learning computer technology in non-scheduled computer laboratory times (after school, weekends). Further, we have plans to use especially proficient older children to assist technology training in our rural site.

Seventh, Demeke Gesesse who received his Master's Degree in Early Childhood Education with an emphasis upon Educational Technology, will complete a second Master's Degree in ICT at AAU in the fall. In addition, he has major responsibilities for the new education technology program at AAU. Demeke is currently in the process of

developing university internships in our lab sites. This emerging coalition is likely to build stronger relationships between university instruction and primary classroom requirements.

Eighth, via the many international friendships which have been made through this project (especially those nurtured through ACEI involvement of project staff), this project is currently poised to begin to connect professors, classroom teachers and students in Ethiopian primary schools with colleagues throughout the world. For example, beginning in the fall continuation project, colleagues from Ethiopia, USA, India, Jordan, and Costa Rica will begin meaningful collaboration.

Ninth, in an attempt to publicize our project designed to explore the potential of technology for uniting teachers and children of the world and to build international coalitions in primary education, our efforts have widely disseminated. Sharing was provided through the following:

Publications in Refereed Professional Journals (see attached)

Hoot, J.L., Szente, J., & Mebratu, B. (2004). Early education in Ethiopia: Progress and prospects. *Early Childhood Education Journal*. 32 (5) 3-8. (attached)

Szente, J., & Hoot J. (2004, Summer). A cyber ray of hope for Ethiopian children.. *Childhood Education* (International Theme Issue) (80,6) 295-299. (attached)

Professional Presentations discussing this project:

Hoot, J.L. (2005, February). *Educating children in a global world*. Keynote address presented at the annual meeting of the Florida Association for Childhood Education International, Ft. Meyers, Florida.

Hoot, J.L. (2005, March) *International Focus on Pedagogy and Practices*. Presented with Vidya Thirumurthy, Lydia Ibanez, Judit Szente, Selamawit Tadesse, Tata Mbugua, Merfat Feyeze, and Linda Mensay at the annual meeting of the Association for Childhood Education International, Washington, DC.

Hoot, J.L. (2005, March) *Educating our world's children on the African continent*. Presented with Judit Szente, Selamawit Tadesse and Tata Mbugua at the annual meeting of the Association for Childhood Education International, Washington, DC.

Hoot, J.L. (2004, April) *Building professional collaborations for children on the African continent*. Presented with Judit Szente, King Center Charter School Research/Special Projects Director; Belete Mebratu, Addis Ababa University, Ethiopia; & Tata Mbugua, University of Scranton, at the annual meeting of the Association for Childhood Education International, New Orleans, LA.

- Hoot, J.L. (2004, November) *Early Education in Ethiopia: Current Challenges and Prospects for the Future*. Presented with Judit Szente at the annual meeting of the World Organization of Early Childhood Education (OMEP). Anaheim, CA.
- Hoot, J.L. (2004, June) *Recent Reforms in Early Childhood Teacher Education in Ethiopia*. Presented with Judit Szente at the annual meeting of the National Association of Early Childhood Teacher Educators, Baltimore, MD.
- Hoot, J.L. (2004, November) *Early Childhood Education in Ethiopia: Problems and Prospects*. Presented with Judit Szente and Selamawit Tadesse at the annual meeting of the National Association for the Education of Young Children. Anaheim, CA.
- Hoot, J.L. (2003, April) *Major challenges/emerging possibilities for teachers and children on the African continent*. Presented with James Ernest, Valdosta State University; Demeke Gesesse & Belete Mebratu, Addis Ababa University, Ethiopia & Tata Mbugua, University of Scranton, at the annual meeting of the Association for Childhood Education International, Phoenix, AZ.
- Hoot, J.L. (2002, April). *Early childhood education in Africa: emerging projects, emerging partners*. Presented with James Ernest; Demeke Gesesse & Belete Mebratu, Addis Ababa University, Ethiopia; Tata Mbugua, University of Scranton; Steve Howard, Ohio University, Athens, Ohio; & Barbara Koech, Kenyatta University, Kenya, at the annual meeting of the Association for Childhood Education International, San Diego, CA.
- Hoot, J.L. (2002, November) *Educating very young children in Ethiopia: problems and promises*. Presented with Demeke Gesesse and James Ernest at the annual meeting of the National Association for the Education of Young Children. NY, NY.
- Hoot, J.L. (2002, November) *Educating very young children in Ethiopia: Problems and promises*. Presented with D. Gesesse & James Ernest at the annual meeting of the National Association for the Education of Young Children. NY, NY.
- Meshasha, A. and M. Zodie (2001, November) *Primary Education in Ethiopia*. Presented at the annual meeting of the Association for Childhood Education International, Toronto, Canada.
- Hoot, J.L. (2001, April). *Technology and its global influence on education*. Presented at the annual meeting of the Association for Childhood Education International, Toronto, Canada.
- Hoot, J.L. (2001, November) *International perspectives on teacher education*. Paper presented at the annual meeting of the National Association of Early Childhood Teacher Educators, Los Angeles, CA.

Hoot, J.L. (2000, March). *Building global bridges into the next millennium*. Keynote address presented at the annual meeting of the International Schools, Brussels, Belgium.

Hoot, J.L. (2000, March). *Strengthening university preparation programs for teachers of young children through international collaboration*. Keynote address presented in honor of the merger of Teacher's Training Colleges in Hungary into the national-wide St. Steven's University System, Jaszbereny, Hungary.

Hoot, J. L. (2000, April). *Global Issues Symposium* Presented with D. Lo, R. Koo, T. Mbugua, S. Moosa, and B. Reingenheim at the annual meeting of the Association for Childhood Education International, Baltimore, MD.

Hoot, J.L. (2000, November) *International perspectives on teacher education*. Paper presented at the annual meeting of the National Association of Early Childhood Teacher Educators, New Orleans, LA.

Finally, despite major problems being unsuccessful in bringing key project personnel to Buffalo for continuation planning and training because of US Embassy visa denials, specific plans are underway for continuation of the project in the fall. Through this plan a pilot group of teachers and children from Ethiopian lab schools will be working on real-life projects with teachers and children from other countries. Specifically, beginning in the fall, primary colleagues from Ethiopia, USA, Costa Rica and India will work in their respective country to develop a project around the theme "An Environmental Problem in My Community." Children and teachers will collaborate with each other and develop a power point project. These projects will then be shared with world colleagues. In addition to developing technology, social, environmental and literacy skills, these projects will develop world friendships for future collaboration.

Lessons Learned

- 1 Teachers need to be able to see technology as a culturally-appropriate tool for learning. For instance, the English-language nature of technology applications can create a barrier for some.
- 2 Technology must be viewed as enhancing curriculum and content, not as separate from them. Learning to use an application, such as PowerPoint, can engage the teacher and student; however, it must serve to add value to and promote the learning/understanding of content.
- 3 Access to working, up-to-date technology is critical. Technical assistance and management is necessary at each school site. While teachers (and students) can and should understand basic troubleshooting procedures, someone with a higher degree of technical expertise should be present at all sites, at all times.
- 4 Professional development should be provided on a regular, ongoing basis by individuals steeped in both curriculum and the culture/language. This helps teachers make connections to their content and students in meaningful ways.

- Professional development must include modeling, discussion, and attention to classroom management strategies.
- 5 Cooperative learning/mentoring/pairing of teachers for professional development creates an environment of collaboration and increases the quality of learning and implementation. Discussions and sharing among teachers promotes their use of technology in their own settings.
 - 6 Because of the communal nature of Ethiopian culture, the inclusion of parents and students in planning for and using technology can help extend the cadre of support. For instance, parents and students can serve as basic technical and/or content support persons. This might be extended to include those in the business/professional communities who can serve as mentors to students.
 - 7 Technology centers might be established in some type of community center, which could serve as access points for many and alleviate inequities that exist between wealthier and poorer schools.
 - 8 Internet access is becoming more important to the learning environment. Many curricular materials and resources are available to both teachers and students, and as a result, textbooks can be supplemented (and sometimes eliminated). Access to the Internet needs to be extended beyond the principal's office and into the lab/classroom.
 - 9 Access to high-quality, reliable electricity and telephone service is necessary to ensure reliability of access.

Recommendations for Future and Follow-On Activities

Teacher training programs must include technology-focused courses and activities. For instance, pre-service teachers should have an opportunity to have courses in basic operations, Internet, and tool software (e.g., word processing, e-mail), as well as be able to observe practicing teachers using technology in their own classrooms. We are optimistic that Demeke Gesesse who was trained in our project and is now in a leadership position in the AAU technology program will facilitate this development. Specific recommendations include:

1. Establish a program through AAU to offer certificate/Masters programs in instructional uses of technology in primary grades. Field experiences in public schools will provide the laboratory activities necessary for participants' completion of the program. Additionally, teacher training institutes and university should collaborate to create such programs and ensure consistency.
2. Consider collaborations within the broader African community to establish technology centers for instructional purposes. This may promote the establishment of more reliable telecommunications technologies to help provide distance learning across the continent.
3. Continue to work on a plan for creating a lasting source of computers for children. Clearly, development of technology skills at all levels is dependent upon ACCESS. During the course of the project, we were able to secure many donations of good used computers for our project. These were obtained from my university as well as from local businesses. My university (and others

throughout the world), are nearly inexhaustible source of free, good quality, used computers which could easily support technology programs in primary grades. If the problem of transporting these computers can be overcome (e.g. obtain the help of Ethiopian Air) computers could be readily available in all primary schools.

4. This project has aptly demonstrated that teachers and children throughout the world are eager to collaborate on projects such as this. As described above, our continuation includes plans to develop literacy, social and environmental sharing via technology. Such cross-cultural sharing could easily be extended to all content areas of the curriculum. Personal friendships developed through this process should go a long way to breaking down barriers of hate among future citizens of feuding nations (e.g. extending the project to the Arab world).