Meeting EFA: Reaching the Underserved through Complementary Models of Effective Schooling

Introduction
In 1990, international donors and country governments worldwide made a commitment to provide quality education for all children, launching the Education for All movement. Sixteen years later, between 77 and 115 million children remain out of school. The challenges of meeting EFA are well documented. The rising costs of educational inputs, which increased the unit costs of conventional approaches to education, make it difficult to reach the rural poor in resource constrained environments. Teacher recruitment and retention impact the ability of Ministries of Education to staff isolated schools and the schools that do exist are often too far from communities for children to attend. The international donor community is beginning to recognize that without changing how educational opportunities are delivered in many developing countries, the goals of Education for All will not be achieved.

In 2004, the United States Agency for International Development (USAID)-funded Educational Quality Improvement Program 2 (EQUIP2) began investigating community-based schools as a mechanism for reaching the underserved populations. The team identified nine models that successfully organized schooling in regions least served by the formal education system. These complementary education approaches rely on community, non-governmental, and ministry collaboration and present a promising response to the challenge of meeting the EFA goals of universal access, completion, and learning. Complementary Education models work in support of the formal public system, offering students an alternative route to achieving the same educational outcomes as students in the government schools. The programs are designed to feed students into the government system at various entry points and are large enough to exhibit many of the same characteristics as mainstream schools. Over time, the models have increased rates of attendance, completion, and learning among the populations they serve.

This EQUIP2 Working Paper synthesizes the findings from the nine case studies of successful complementary education programs in Afghanistan, Bangladesh, Egypt, Ghana, Guatemala, Honduras, Mali, and Zambia. The research demonstrated that the programs are more cost-effective than government schools in delivering education services and that they achieve higher learning outcomes through adjustments in school size and location, curriculum and language of instruction, school management and governance arrangements, and teaching staff and instructional support services. Detailed findings from each country are available in the EQUIP2 Meeting EFA Case Studies series.

Overview of Case Studies
The nine cases analyzed by EQUIP2 offer different approaches to helping children obtain the same educational objectives as students in regular public schools. The programs are specifically designed to complement the public education system in each country, and are not meant to serve as non-formal alternatives to primary education. Also, the programs serve
populations that otherwise have limited or no access to government provided schooling. The table below summarizes some of the basic information about each case.

### Summary of Complementary Education Case Studies Included in the Research

<table>
<thead>
<tr>
<th>Country</th>
<th>Target Population</th>
<th>Level of Education</th>
<th>Peak Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan: Community Schools</td>
<td>Rural children with focus on girls</td>
<td>Complete primary cycle to grade six with transfer into public schools</td>
<td>45,513</td>
</tr>
<tr>
<td>Afghanistan: Home-Based Schools</td>
<td>Rural children with a focus on girls</td>
<td>Complete primary cycle to grade six with transfer into public schools</td>
<td>14,000</td>
</tr>
<tr>
<td>Bangladesh: BRAC Primary Schools</td>
<td>Rural children</td>
<td>Complete primary cycle to grade six in four years (modified to six)</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Egypt: Community Schools</td>
<td>Rural children with focus on girls</td>
<td>Complete primary cycle to grade six</td>
<td>4,700</td>
</tr>
<tr>
<td>Ghana: School for Life</td>
<td>Rural children</td>
<td>Primary cycle to grade three with transfer into public schools</td>
<td>9,000</td>
</tr>
<tr>
<td>Guatemala: PRONADE</td>
<td>Rural children</td>
<td>Complete primary cycle to grade six</td>
<td>455,000</td>
</tr>
<tr>
<td>Honduras: Educatodos</td>
<td>Adults who had not completed primary school</td>
<td>Complete primary cycle to grade six in three years and complete lower secondary to grade eight</td>
<td>117,000</td>
</tr>
<tr>
<td>Mali: Community Schools</td>
<td>Rural children</td>
<td>Complete primary cycle to grade six</td>
<td>50,000</td>
</tr>
<tr>
<td>Zambia: Community Schools</td>
<td>Orphaned and vulnerable children</td>
<td>Complete basic education to grade seven</td>
<td>500,000</td>
</tr>
</tbody>
</table>

The Bangladesh Rural Advancement Committee (BRAC) primary education program in Bangladesh began in the mid-1980s and served as a model for many other community-based, NGO-supported approaches to providing primary education to rural, disadvantaged populations. In Bangladesh, Egypt, Ghana, Guatemala, and Mali, the complementary programs create, operate, and support small classes located directly in the remote villages where rural people, particularly girls, previously had almost no access to schooling. In the villages where they work, these programs help establish community-based school governance and management structures.

The two cases from Afghanistan were developed under extreme circumstances. The models for delivering education developed by CARE and the International Rescue Committee (IRC) had to deal with Afghanistan’s near constant state of war, overcome a ban on female education, and work within the religious edicts governing girls’ and women’s behavior. Home-based schools, where students are assembled in the home of a trusted member of the community, were a response to this situation.

The Educatodos program in Honduras targets drop outs, particularly those ages 20-40, who seek an opportunity to complete their primary and secondary education. Initial access in Honduras is fairly universal, but the drop out rate is very high. Educatodos’ shortened version of the primary cycle offered in community centers, work places, and churches allows older students to return to school and obtain primary completion. The program also offers lower secondary education.
In Zambia, community schools formed in part as a response to the HIV/AIDS epidemic and the fiscal crisis constraining government services during the 1990s. Communities started their own schools in the absence of a nearby public school and in order to help families and orphans unable to meet the costs associated with government schooling.

Some programs are sponsored by government, while others rely almost exclusively on outside financing. PRONADE in Guatemala is a government program that allocates resources to communities to establish and run schools. The government of Honduras paid a percentage of the cost of the Educatodos program. In Egypt, the government pays community school teacher salaries. The government in Mali paid community school teachers for a few years as part of a negotiated debt forgiveness plan. In the other cases, the government may contribute some curriculum materials for schools, or may include schools in the official system of supervision and support. In Zambia, government grants-in-aid are available to community schools, but most rely almost exclusively on community, NGO, or faith-based support. The programs in Afghanistan rely almost entirely on NGO and community input, until the schools are absorbed into the reemerging formal education system.

All of the programs rely on community support. In many cases, the communities hire and pay the teachers and manage the day-to-day operation of the school. Community financing is generated through small fees or through broader community-wide contributions to the school.

**Effectiveness**

Each case was examined to see how effectively it provides access for the populations it targets, how well it ensures completion of primary school for the children that do enroll, and, where data permit, whether students demonstrate levels of learning at least commensurate with those achieved in government schools.

Several programs significantly augment access to primary education in the country, especially in the remote, rural areas they target:

- CARE’s community schools (COPE) account for 9 percent of the enrollment in six provinces in Afghanistan.
- BRAC provides 50 percent of the enrollment in rural areas in Bangladesh.
- Save the Children community schools doubled the enrollment in Kolondieba, Mali.
- PRONADE accounts for 15 percent of the enrollment in Guatemala.
- Community schools provide 25 percent of the total enrollment in Zambia.

The four other programs are small in scale, but have significant impact in the areas where they work or for the populations they target. In these cases, the community schools are launched in villages where there is essentially no access to education. In Ghana and Egypt, the programs work to systematically enroll all the school-age children in a village. Since its inception in 1996, the Educatodos program in Honduras has provided over 500,000 overage students a second chance at completing primary school.
Completion data are available for all the cases included in this study. In all but one case, the completion rates in the community-based schools meet or surpass those achieved on average in formal public schools.

Data on learning were harder to obtain. Some measure of learning is available for all cases, however in some, the data for complementary programs and public schools are not comparable. For BRAC, Egypt, Honduras, Mali, and Zambia, it is possible to directly compare complementary education and regular public school students’ results. For the programs in Afghanistan and Ghana it is only possible to show results for complementary education students. At the time of this research, some data on student performance at the end of the primary cycle in regular public schools in Ghana were available and provided an estimate of learning that was compared to the data from the School for Life program. No data on learning are available for Guatemala.

While serving some of the most disadvantaged families in each country, these nine community-based complementary programs are demonstrating that they can produce results comparable to or better than those obtained in regular public schools. It should be noted that the programs are not selecting the privileged or parents who have a higher intrinsic demand for education. In fact, in most cases these programs are the only schools available and tend to be located in poor areas. Take the example of community schools in Zambia. The households of community school students are poorer and less educated than those of students attending regular public schools. Less than a third of community school families live in permanent structures compared to 46 percent of public school families. Students attending rural community schools are 13 percent more likely than students in rural government schools to report never having breakfast before school. Community school families have on average less education than the families of students enrolled in government schools and community schools students are more likely to speak only a local language at home (Kenyika et al, Zambia’s National Assessment Survey Report, 2005). The following table provides a summary of the effectiveness of the nine programs.

In Afghanistan, Bangladesh, Egypt, Ghana, Guatemala, and Mali, the complementary education programs achieve completion rates that surpass those of the formal public schools in each country. In Zambia, it was not possible to disaggregate government and community schools. In Honduras, public schools had completion rates higher than the complementary education program but one should note that this program targets young people who had already failed in standard education.

In Bangladesh, Egypt, Honduras, Mali, and Zambia, it is possible to compare learning outcomes of community and public schools using available data from a single measure. In Bangladesh a much higher percentage of BRAC students than government students meet the benchmarks for basic competencies in all subjects—70 percent compared to 27 percent. In Zambia, 40 percent of community school students meet minimum standards in reading compared to 35 percent of government school students. In Mali and Egypt, pass rates for the end of primary cycle examination for community school students are higher than for regular public school students.
Effectiveness of Complementary Education Programs

<table>
<thead>
<tr>
<th>Country</th>
<th>Program Type</th>
<th>Access Description</th>
<th>Complementary Completion</th>
<th>Public Completion</th>
<th>Learning Complement</th>
<th>Public Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>Community Schools</td>
<td>Provided 9% of total enrollment in six provinces in 2003. Provided 100% of national girls’ total enrollment in 2001.</td>
<td>Complementary: 50%</td>
<td>Public: 32%</td>
<td>Complementary: 94%</td>
<td>Public: N/A</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>Home-Based Schools</td>
<td>Provided only access in some areas, particularly for girls.</td>
<td>Complementary: 68%</td>
<td>Public: 32%</td>
<td>Complementary: 99%</td>
<td>Public: N/A</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>BRAC Primary Schools</td>
<td>Provided 8% of total national enrollment. Provided up to 50% of total enrollment in rural areas.</td>
<td>Complementary: 94%</td>
<td>Public: 67%</td>
<td>Complementary: 70%</td>
<td>Public: 27%</td>
</tr>
<tr>
<td>Egypt</td>
<td>Community Schools</td>
<td>Provided only access in some area, particularly for girls.</td>
<td>Complementary: 92%</td>
<td>Public: 90%</td>
<td>Complementary: 94%</td>
<td>Public: 73%</td>
</tr>
<tr>
<td>Ghana</td>
<td>School for Life</td>
<td>Raised enrollment rate for grades one through three in Northern Region from 69% to 83%.</td>
<td>Complementary: 91%</td>
<td>Public: 59%</td>
<td>Complementary: 81%</td>
<td>Public: 65%</td>
</tr>
<tr>
<td>Guatemala</td>
<td>PRONADE</td>
<td>Provided 15% of total national enrollment.</td>
<td>Complementary: 98%</td>
<td>Public: 62%</td>
<td>Complementary: N/A</td>
<td>Public: N/A</td>
</tr>
<tr>
<td>Honduras</td>
<td>Educatodos</td>
<td>Served approximately 30% of total out-of-school population.</td>
<td>Complementary: 61%</td>
<td>Public: 68%</td>
<td>Complementary: 63%</td>
<td>Public: 62%</td>
</tr>
<tr>
<td>Mali</td>
<td>Community Schools</td>
<td>Raised enrollment rate in Sikasso from 35% to 62%.</td>
<td>Complementary: 67%</td>
<td>Public: 56%</td>
<td>Complementary: 51%</td>
<td>Public: 43%</td>
</tr>
<tr>
<td>Zambia</td>
<td>Community Schools</td>
<td>Increased total national enrollment by 25%. Program enrollment included up to 30% orphans and vulnerable children.</td>
<td>Complementary: 72%</td>
<td>Public: 72%</td>
<td>Complementary: 40%</td>
<td>Public: 35%</td>
</tr>
</tbody>
</table>

Cost-Effectiveness

In each case, the EQUIP2 study applies a method for comparing the cost-effectiveness of a complementary model to the cost-effectiveness of regular public schools. The costs of access, completion and learning are calculated and evaluated with respect to the outcomes achieved. Total recurrent costs for both complementary and government schools were divided by the respective numbers of students to obtain a per-pupil cost of access. Development costs associated with the start up of a complementary education project or program are included. Capital costs for construction are excluded from both government and complementary program cost calculations. Based on unit recurrent costs, a cost per student completing a given number of years is estimated by multiplying the unit cost by the number of years and dividing by the completion rate. When measures of learning are available, the cost per learning outcome is calculated by dividing the cost per completer by the percentage of students achieving the desired outcome.

This analysis is not intended to permit any cross-country comparisons. Rather, it is meant only to indicate within each country the cost-effectiveness of both regular public and complementary education programs. What the analysis does show fairly consistently is that the complementary education models studied are effective at reaching underserved populations and are more cost-effective in terms of the amounts of completion and learning achieved for the resources spent.
The following table summarizes the recurrent annual per pupil costs, the completion rates, costs per completer, learning outcomes, and cost per learning outcome for the government and complementary programs.

<table>
<thead>
<tr>
<th>Country</th>
<th>Program</th>
<th>Annual Per-Pupil Cost</th>
<th>Completion Rate</th>
<th>Cost Per Completer</th>
<th>Students Meeting Learning Outcome</th>
<th>Cost Per Learning Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>Community Schools</td>
<td>$38</td>
<td>50%</td>
<td>$453</td>
<td>94%</td>
<td>$482</td>
</tr>
<tr>
<td></td>
<td>Home-Based Schools</td>
<td>$18</td>
<td>68%</td>
<td>$132</td>
<td>99%</td>
<td>$134</td>
</tr>
<tr>
<td></td>
<td>Public</td>
<td>$31</td>
<td>32%</td>
<td>$485</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>BRAC</td>
<td>$20</td>
<td>94%</td>
<td>$84</td>
<td>70%</td>
<td>$120</td>
</tr>
<tr>
<td></td>
<td>Public</td>
<td>$29</td>
<td>67%</td>
<td>$246</td>
<td>27%</td>
<td>$911</td>
</tr>
<tr>
<td>Egypt</td>
<td>Community Schools</td>
<td>$114</td>
<td>92%</td>
<td>$620</td>
<td>94%</td>
<td>$659</td>
</tr>
<tr>
<td></td>
<td>Public</td>
<td>$164</td>
<td>90%</td>
<td>$911</td>
<td>73%</td>
<td>$1,248</td>
</tr>
<tr>
<td>Ghana</td>
<td>School for Life</td>
<td>$39</td>
<td>91%</td>
<td>$43</td>
<td>81%</td>
<td>$53</td>
</tr>
<tr>
<td></td>
<td>Public</td>
<td>$27</td>
<td>59%</td>
<td>$135</td>
<td>65%</td>
<td>$1,500</td>
</tr>
<tr>
<td>Guatemala</td>
<td>PRONADE</td>
<td>$119</td>
<td>98%</td>
<td>$729</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Public</td>
<td>$155</td>
<td>62%</td>
<td>$1,500</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Honduras</td>
<td>Educatodos</td>
<td>$40</td>
<td>61%</td>
<td>$197</td>
<td>63%</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Public</td>
<td>$102</td>
<td>68%</td>
<td>$803</td>
<td>62%</td>
<td>N/A</td>
</tr>
<tr>
<td>Mali</td>
<td>Community Schools</td>
<td>$47</td>
<td>67%</td>
<td>$421</td>
<td>51%</td>
<td>$825</td>
</tr>
<tr>
<td></td>
<td>Public</td>
<td>$30</td>
<td>56%</td>
<td>$322</td>
<td>43%</td>
<td>$729</td>
</tr>
<tr>
<td>Zambia</td>
<td>Community Schools</td>
<td>$39</td>
<td>72%</td>
<td>$376</td>
<td>40%</td>
<td>$939</td>
</tr>
<tr>
<td></td>
<td>Public</td>
<td>$67</td>
<td>72%</td>
<td>$655</td>
<td>35%</td>
<td>$1,873</td>
</tr>
</tbody>
</table>

In the IRC program in Afghanistan, and in Guatemala, Egypt, Bangladesh, Honduras, and Zambia, unit recurrent cost is lower in the community schools than in the regular public schools. In Ghana, Mali, and the COPE project in Afghanistan, the annual unit cost of the complementary education programs is higher than government costs, but their superior performance brings the cost per completer and per learning outcome to a level below that of government schools, except in Mali.

Completion rates are higher in the complementary programs in both cases in Afghanistan, and in Bangladesh, Egypt, Ghana, Guatemala, and Mali. In Zambia, national completion rates include public and community schools. In Honduras, public schools have higher completion rates than Educatodos schools. In all cases except Mali, the cost per completer in complementary programs are lower than the cost per completer in regular public schools.
In the case of BRAC, Ghana, and Honduras, the complementary programs are three times as cost-effective at producing completers.

Learning outcomes achieved in complementary education programs are greater than those achieved in the public school systems in Bangladesh, Egypt, Ghana, Mali, and Zambia. The complementary programs in Bangladesh, Egypt, Ghana, and Zambia are also more cost-effective at producing measurable learning outcomes. In Bangladesh, the measure of learning is the primary end of cycle competency exam while in Egypt and Mali, student pass rates on the primary certification examination are used. In Ghana, data are available from a minimum competency test administered to School for Life students, and those data are compared to national CRT pass rates for public schools. In Zambia, community school and public school student learning is measured by a single minimum competency exam that all students take.

The complementary education models studied are more cost-effective because they are more educationally effective than regular public schools. For the cases where data are available to show student learning for both public schools and complementary models, the models outperform the public schools on the same measure of learning—often by a lot, and always while serving significantly more disadvantaged students and doing so with less qualified teachers.

In two cases, increased cost-effectiveness also derives in part from a “short-cut” approach to the primary cycle. The School for Life in Ghana condenses three years of primary school into nine months. Educatodos in Honduras covers six years of primary school in three years. BRAC primary schools and community schools in Zambia also began by covering the full primary cycle in less than the prescribed number of years, but later came to emulate their respective official cycles.

**Lessons from Complementary Education**

In each of the nine cases reviewed in this study, government, donors, and non-governmental actors have been able to work with communities to:

- Create schools that are located in the villages where families live, making it easier for children, especially girls, to enroll in school and attend regularly;
- Set up community-based management structures that are able to effectively oversee the day-to-day operations of their schools, assuring student and teacher attendance, setting the calendar and schedule, collecting contributions, and paying teachers;
- Develop a simplified and focused local-language based curriculum;
- Provide the materials and instructional strategies that support the modified curriculum and, in some cases, relate to the local/regional context and issues;
- Identify, recruit, and hire teachers from within the community;
- Support those teachers either monetarily or through in-kind contributions;
- Promote ongoing community engagement and participation in assuring the success of the school; and
- Provide regular support and ongoing training for teachers and community-based school management committees.
The ability of complementary education programs to work in the above ways has important implications for how countries work to achieve their EFA goals. In fact, these programs demonstrate that to reach underserved populations, governments need to reconsider several facets of how they organize the supply of education. Specifically, complementary education programs hold important lessons in terms of where to locate schools, how big schools should be, how schools should be managed and by whom, how to improve curriculum and instruction, and most importantly, how to ensure an adequate supply of teachers.

**Location and Size of Schools**

Governments tend to locate primary schools in areas that can draw from several villages to realize an enrollment of hundreds of children. The lesson from complementary models in Guatemala, Northern Ghana, Upper Egypt, Bangladesh, Zambia, Mali, and Afghanistan is that distance to school is a significant barrier to access, especially for girls. World Bank research reveals that enrollment declines considerably when the distance to school exceeds one kilometer. For example, in the mid-1990s, female enrollment in Upper Egypt’s rural hamlets was estimated at 15 percent. Families complained that the distance to the nearest school was too great for their daughters. The United Nations Children’s Fund (UNICEF) responded by designing a community school project to target small hamlets with at least 50 out-of-school children. Each community school enrolled a multi-age student cohort and limited class size to 30 students. Female facilitators tailored learning activities to the different levels and ages of the group and created a safe environment for girls to attend.

The complementary models in the EQUIP2 case studies have reconceived the primary school as a village-based institution. This means a smaller school, smaller class sizes, and lower student-teacher ratios of about 30 to 1. The schools are often designed to recruit and move an available cohort of school-aged children through the primary grades.

**Governance and Decision Making**

For years governments have struggled with how to mandate, entice, or facilitate increased community participation in public schools. Many countries require schools to have parent associations or insist that communities contribute to the construction of a government school. Rather than trying to enlist community support for an existing school, the complementary education programs reviewed in this study help communities establish their own schools.

In complementary models, local and international NGOs help communities address their own educational needs. Partner organizations lead community members through a series of exercises to set up a management committee, identify student and teacher candidates, allocate classroom space from existing buildings, and collect funds for new school construction. As a result, communities approach the process with a sense of ownership. NGOs train the school management committees to set up enrollment systems, develop a class schedule, monitor student and teacher attendance, and determine fees or collect donations for materials and teachers’ salaries. Not all community-based management committees function well. However, these nine studies show that with ongoing support, communities can set up effective committees and schools.
In Mali, Save the Children and its local partners identify villages that do not have access to public schools and that express an interest in starting a community school. Village leaders designate a five-member school management committee before Save the Children starts work with that community. The committee is required to set and collect school fees, recruit teacher candidates, and enroll an equal number of boys and girls. The partner NGO then provides training for the school management committee, supports the processes of teacher and student identification, and facilitates the formal relationship between the community school and the local educational authority. The community school becomes official when it submits a Declaration of Opening to the local authorities and abides by the community school guidelines developed jointly by the NGOs and the Ministry of Education.

In Guatemala, the government relies on local education committees to organize and operate schools. A department within the Ministry of Education distributes a per-pupil allocation to each committee. According to the DP Tecnología study Estudio Cuasi-Experimental de Resultados de PRONADE Año 2001, PRONADE’s administrative structure was one of the most important features to increasing parental involvement in school management and improving enrollment and retention.

Language of Instruction and Curriculum

Many complementary education programs make use of local language instruction and a modified version of the recognized national curriculum to improve access, completion, and learning. The programs in Ghana, Guatemala, Mali, and Zambia use local language as media of instruction. The other programs use a language spoken regionally in their countries. Use of local language necessitates, at a minimum, adaptation of curriculum and materials to that language, and makes it possible to locally recruit teachers. The programs in Ghana, Mali, and Egypt have also modified curriculum to reduce the number of subjects covered and to incorporate relevant subject matter for the local population.

In Egypt’s community schools, the curriculum was modified primarily to accommodate a decidedly different view of the learning relationship between teachers and students and to enable multiage teaching. Students in a typical Upper Egypt community school classroom work most of the day on self-planned projects, either individually or in small groups. The classrooms are organized into learning corners outfitted with various learning materials like pictures, books, puzzles, games, flashcards, cultural objects, and the children’s artwork.

As mentioned above, programs in Ghana and Honduras modify the curricula to cover a portion of the primary cycle over a shorter period. School for Life in Ghana covers the equivalent of three years of primary school in nine months, and Educatodos in Honduras completes the six grades of the primary cycle in three years. In Zambia, Skills, Participation, and Access to Relevant Knowledge (SPARK) was developed as an alternative curriculum for accelerated learning, designed for students who enter school at an older age. It compresses the seven grades of basic education into four years. However, community schools moved away from the SPARK curriculum because it did not prepare students for the end of primary cycle exam and began following the national curriculum as they increasingly served primary school-age children. A similar evolution took place in Mali. As community schools became better established, parents wanted them to conform more directly to the national curriculum, for example by introducing French in the upper primary grades.
Another example of curriculum modification can be found in the case of the home-based schools supported by the International Rescue Committee in Afghanistan. Many Afghan teachers and students have experienced violent conflict. All are now living with the social, economic, and political uncertainties of the transition to peace. In response, IRC-sponsored home-based schools go beyond helping children to read and write by providing safe environments conducive to developing peaceful relationships. The home-based school curriculum relies on methods and activities specifically designed to foster well-being and comfort.

In Mali, Bangladesh, and Zambia, community-based schools were launched as non-formal alternatives to regular public schools that children would attend for a few years solely to acquire basic literacy. However, over time the complementary programs evolve to become more like regular schools—in terms of the curriculum followed and in terms of their preparation of students for further years of education.

**Teachers, Teacher Training, and Support**

The biggest obstacle faced by governments in trying to achieve EFA is an inadequate supply of teachers. Governments are not able to produce sufficient numbers of qualified teachers, assign them to the remote areas where they are needed, and meet the higher wage bill implied by a dramatic expansion of the teaching force. Complementary education models have overcome this bottleneck by taking a decidedly different approach to teacher supply.

All of the complementary education programs in this study rely on the premise that individuals capable of teaching primary school reside in or near each village. Those individuals need initial training and regular support to be pedagogically effective. However, they:

- Live where the schools are and therefore do not need to be enticed to accept a posting to a remote area;
- Know the children and families and are trusted members of the community;
- Are hired by the community and therefore directly answerable to people with whom they have pre-existing relationships;
- Often recognize their limitations and are more receptive to the training and support offered by the complementary education programs; and
- Are often initially willing to work for much less compensation and in many cases are volunteers.

The complementary education programs in this study all work with less formally educated and minimally compensated teachers. The following table shows the average level of education, the nature of employment, and the official status of teachers in each of the nine cases.

Since these programs all rely on less formally educated and minimally compensated teachers, they also make use of regular training and support. In principle, government systems of education provide ongoing training, supervision, and support for teachers. However, regional or district education support personnel rarely, if ever, get out to visit all the schools in their jurisdictions, especially those in the most remote parts of the country. In the 2006
study “Synthesis Report: Local Studies on the Quality of Primary Education in Four Countries” conducted in East African countries, Heneveld, Nidde, Rajonhson, and Swati found that school supervision and support were infrequent, lacked any meaningful follow up, were unfocused and confused several purposes, and were not visibly associated with improving school outcomes. In contrast, complementary education programs included in this study ensured that all teachers:

- Receive an initial training, usually of a few weeks duration, prior to the start of school;
- Are visited regularly, in many cases weekly, by field staff or by a more senior teacher;
- Participate in meetings with other teachers to reflect on their practice; and
- Are enrolled in follow-up training during the year and/or at the end of the school year.

### Complementary Education Program Teachers

<table>
<thead>
<tr>
<th>Country</th>
<th>Level of Education</th>
<th>Nature of Employment</th>
<th>Official Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan: Community Schools</td>
<td>Grade 12</td>
<td>Paid by community</td>
<td>No</td>
</tr>
<tr>
<td>Afghanistan: Home-Based Schools</td>
<td>Some secondary</td>
<td>Paid by community</td>
<td>No</td>
</tr>
<tr>
<td>Bangladesh: BRAC Primary Schools</td>
<td>Some secondary</td>
<td>Paid by community</td>
<td>No</td>
</tr>
<tr>
<td>Egypt: Community Schools</td>
<td>Some secondary</td>
<td>Paid by government</td>
<td>Yes</td>
</tr>
<tr>
<td>Ghana: School for Life</td>
<td>Elementary or some secondary</td>
<td>Volunteer with small NGO stipend or community donations</td>
<td>No</td>
</tr>
<tr>
<td>Guatemala: PRONADE</td>
<td>Licensed primary or pre-primary</td>
<td>Paid by Ministry of Education</td>
<td>Yes</td>
</tr>
<tr>
<td>Honduras: Educatodos</td>
<td>Some secondary – usually Educatodos graduate</td>
<td>Volunteer with small government stipend</td>
<td>No</td>
</tr>
<tr>
<td>Mali: Community Schools</td>
<td>Elementary or some secondary</td>
<td>Paid by community – previously paid by government</td>
<td>No</td>
</tr>
<tr>
<td>Zambia: Community Schools</td>
<td>Some secondary</td>
<td>Volunteer with small NGO or community donation</td>
<td>No</td>
</tr>
</tbody>
</table>

What complementary programs lack in resources for compensating teachers, they make up for in resources devoted to providing an extensive on-the-ground network of teacher and school support and supervision. In Egypt, Ghana, Mali, and both programs in Afghanistan, schools are visited at least once per month by teacher support staff who observe instruction and provide immediate, on-the-spot feedback and professional development. In Bangladesh, BRAC program officers visit schools as frequently as twice a week.

### Policy and Education System Implications

Not all complementary education programs are successful. Even among those that achieve some success, not all schools are uniform in quality. However, the cases included in this paper and other models in Colombia, Pakistan, Ethiopia, and Uganda are worth...
examining because they identify some important lessons for establishing effective schools for underserved populations. In particular, this research addresses several important questions:

- What factors appear to contribute most to the effectiveness of community-based schools?
- How can public sector plans for achieving EFA take into account the lessons from complementary approaches?
- What are the long-term implications of community-based approaches to organizing and funding primary schools?

**What factors contribute most to community-based schools’ effectiveness?**

As discussed earlier, several factors clearly make it possible for these complementary education programs to work effectively at delivering education to underserved populations. In sum, those factors depend on an inherently decentralized approach that changes some of the basic ways in which schools are organized and managed.

Complementary programs work with communities to set up schools that are smaller in scale than traditional public schools and are located in the villages where children live. Placing a school in a village makes it easier for students to attend, especially girls. Because the school is set up through a partnership with the community, community members take more active roles in assuring student and teacher attendance. Regular attendance is part of what improves learning and increased persistence in school. For example, PRONADE schools in Guatemala average 180 days of class per year compared to 125 days in regular public schools. Daily student attendance rates in School for Life in Ghana are above 90 percent, while surveys done by USAID/Ghana in 2002 indicate daily attendance of approximately 75 percent in regular public schools.

Higher attendance rates only lead to better outcomes if instruction is occurring during the time students are in school. Field reports from School for Life indicate a very high proportion of total class time is utilized for teacher/learner interaction. Lesson designs focus entirely on building literacy and numeracy skills. In contrast, Winkler reported that teacher attendance and time on task in Ghanaian public schools is very low and a serious problem in Public Expenditure Tracking in Education. The study found that less than 75 percent of public school staff were typically at school on any given day and that only about 30 percent of the total school timetable was used for building language and numeracy skills. Winkler reported teacher absentee rates in public schools as high as 27 percent in Uganda, 25 percent in India, 19 percent in Indonesia, and 17 percent in Zambia.

Teachers with adequate training and support use class time effectively. The most counterintuitive lesson of the complementary education models is that locally recruited teachers with less education can become more effective learning facilitators than fully trained and certified public school teachers. Putting under-qualified instructors in front of children will not lead to learning unless those individuals are adequately and frequently supported. All the programs studied made use of networks of well-trained teacher support personnel to visit schools at least once a month, and usually more frequently when a teacher is first employed. Teachers are given initial training and additional intensive training during their first year and for several years thereafter. In Egypt, mentoring relationships and networks are also set up between experienced and new community school teachers.
Like the locally recruited teachers, communities can effectively manage schools when they are adequately and frequently supported. Here again the NGOs who manage complementary programs make use of their networks of on-the-ground staff to provide initial and ongoing training and support to school management committees. Communities are not expected to figure everything out on their own. Well tested models for community mobilization and training are instrumental in generating the necessary engagement and setting up effective local management structures. The experience and expertise of NGOs and grassroots organizations in this kind of work is a critical component of all of the complementary programs included in this study.

The prominence of the community’s role in setting up and running a school and the reliance on a broad network of support resources that can frequently reach each school and community imply an inherently decentralized approach to providing education. A lesson from these programs is that reaching underserved populations with effective education is going to take genuine decentralization, not just the movement of administrative functions to lower levels of the education system. Genuine local control and structured approaches to local decision making are part of what enable community-based schools to be effective.

**What can the public sector learn from complementary approaches to EFA?**

In addition to supporting the kind of inherently decentralized approaches to primary education mentioned above, governments can proactively work with complementary education programs. The public sector can take advantage of complementary approaches’ success in four ways:

- Provide resources and support for complementary programs.
- Directly apply lessons from complementary approaches to more effectively reach underserved areas and populations.
- Seek partnerships with and support NGOs implementing complementary education programs.
- Use complementary models for decentralized management because they are better able to address systems changes.

The table on the following page summarizes how the complementary education programs in this paper collaborate with their governments. The table indicates the types of direct support different programs may receive from the government in their respective settings.

Guatemala provides an example of a government initiated complementary education program. After piloting a project for increasing access in remote areas, the government passed a law that institutionalized its complementary approach within the Ministry of Education. The government granted legal status to community-based education committees, defined criteria for establishing schools, established a ministerial department to oversee the allocation of funds and support for community-based schools, and developed mechanisms for contracting with NGOs for technical assistance and support services. The government established a fiscal trust to assure all PRONADE funding, including 90 percent from federal resources.
Collaboration with and Support from Government

<table>
<thead>
<tr>
<th>Collaboration with Government</th>
<th>Government Support</th>
</tr>
</thead>
</table>
| Afghanistan: Community Schools | • Students officially recognized and able to transfer to public schools  
|                              | • Use Ministry of Education curriculum  
|                              | • Facilitates capacity building activities for Ministry of Education staff and teachers  
|                              | • Community schools being progressively converted to official public schools while program continues to open new schools in remote areas  |
| Afghanistan: Home-Based Schools | • Students officially recognized and able to transfer to public schools  
|                               | • Use Ministry of Education curriculum  
|                               | • Home-based schools being progressively converted to official public schools  |
| Bangladesh: BRAC Primary Schools | • Students officially recognized and able to transfer to public schools  
|                                | • Coordination unit created to improve relations between BRAC and government  |
| Egypt: Community Schools | • Program designed jointly  
|                             | • Curriculum developed with government institutions  
|                             | • Students officially recognized and able to transfer to public schools  
|                             | • Pays teacher salaries  
|                             | • Provides books and materials  
|                             | • Applies community school lessons to other programs and projects  |
| Ghana: School for Life | • Students officially recognized and able to transfer to public schools  
|                        | • Provides student testing  
|                        | • Provides access to distance learning for locally recruited teachers  |
| Guatemala: PRONADE | • Initiated by government as formal system to partner with communities and NGOs  
|                        | • Pays 90% of costs through government-established trust  
|                        | • Law establishes school committees as formal entities and defines relationship between Ministry offices, communities, and NGOs  |
| Honduras: Educatodos | • Program developed with government  
|                     | • Students officially recognized and able to transfer to public schools  
|                     | • Government pays a portion of program costs  |
| Mali: Community Schools | • Local education authorities provide some oversight and support  
|                            | • Students officially recognized and able to transfer to public schools  
|                            | • Government promotes community schools  
|                            | • Salaries paid during a short period as part of a debt-forgiveness program  |
| Zambia: Community Schools | • Students officially recognized and able to transfer to regular schools  
|                            | • Some community schools use Ministry of Education curriculum  
|                            | • Secretariat created to oversee development of community schools  
|                            | • Some grants-in-aid for community schools  |

Egypt is an example where the government both provided direct support to a complementary education program and worked to apply the lessons learned from the project on a broader scale in the public sector. The government worked in partnership with UNICEF from the beginning of the community school program. The ministry of education demonstrated its support by agreeing to pay the salaries of community school teachers, provide school books and teacher guides, contribute to the development of curriculum and teacher training programs, and assure school feeding at community schools.

UNICEF designed the model of community education, provided training for program staff, and ensured management and ongoing support through its partnerships with local NGOs.
By agreeing to collaborate fully with the project, and by assuring from the beginning its financial and institutional contribution to the program, the Egyptian government effectively cleared space in the educational landscape for this experiment in community-based schooling. The success of the community school initiative in turn triggered and facilitated an informed education sector dialogue during the last decade in Egypt. Lessons learned have not only included how to effectively provide education to physically remote children (especially girls), but also how to engage students, teachers, and communities in ongoing, active learning and democratic decision-making.

In The Pedagogy of Empowerment: Community Schools as a Social Movement in Egypt, Zaalouk described the complementary education program in Egypt as a “seed bed” for reform, rather than a “scaleable” operation. This meant that the emphasis from the beginning was on learning what worked and then setting up the means to apply it in other initiatives and efforts as a way to expand the impact, rather than the spread of the project itself.

In Ghana, the national government has issued directives to districts to cooperate with providers of complementary education. As a result, district directors of education and circuit supervisors work with the complementary education providers to locate community-based schools, train and supervise voluntary teachers, and assess student learning. The district education office conducts an assessment of all pupils at the end of the School for Life program. Pupils who complete the complementary education program, and who pass the end of program examination, are admitted into grade four of regular public schools. A key policy initiative included in the government’s education sector plan is to support volunteer teacher programs in rural areas with an emphasis on local recruitment, especially of female teachers. For example, the government grants volunteer teachers in complementary education programs access to distance learning that can lead to formal certification. With donor support, the ministry is also developing and implementing a program of training modules that leads to certification for volunteer teachers, and that affords them the option to apply for positions within the teacher service. The favorable policy environment for complementary education in Ghana has prompted several NGOs to apply the School for Life model in other parts of Northern Ghana.

**What are the long-term implications of community-based approaches?**

Governments can build on the work of complementary education programs in the ways described above. However, they also need to take into account several longer-term issues when considering how best to promote, support, sustain, or draw lessons from complementary education programs.

While the complementary education programs included in this study exhibit educational outcomes that meet or exceed those obtained in regular public schools in each of their respective countries, none of the programs would be helpful as examples of educational excellence. These programs are designed to assure a minimum standard of quality to populations who are otherwise poorly served or not served at all. A longer-term consideration has to be how the quality of these schools can be improved over time. What investments will best improve the quality of community-based schooling without inadvertently undermining the very factors that contribute to their success in the first place?
For example, additional training and support for locally recruited teachers cannot sever their connections to the communities; that is part of what enables those teachers to be successful. Also, introduction of the additional resources from which most rural schools could benefit cannot lead to a dissolution of local control.

At some point, programs that rely on community contributions and/or voluntary efforts to assure provision of basic education cannot exist alongside regular government schools that are supported through the ongoing allocation of public resources. If one set of students and families receives education that is publicly funded, while another set (usually the already least favored and most underserved) must rely on its own resources to obtain education, then the system is dualistic and inherently inequitable. The objective of targeting underserved populations is to promote greater equity in access to and success in education. If that targeting requires those populations to make financial contributions that other more favored groups are not asked to make, then the equity objective is in fact subverted. Therefore, governments must devise methods through which public resources can be made available to complementary education programs.

How resources get transferred to complementary education programs matters as much as their presence. For example, the Ugandan government has financed some complementary education centers, paying teacher salaries and providing instructional materials. However, it has been noted that once the government takes over the payment of salaries, the elements that make the alternative schools work well—local teachers selected by the community, shorter school days, regular supervision, small class sizes, community oversight—tend to be replaced by more formal procedures typical of government-run schools. The government cannot take over the decision-making best left to community-based school management committees simply because resources are now being transferred from the state to the local level. In fact, mechanisms such as block grants or grants-in-aid may be most effective for funneling resources to community schools without usurping local decision-making because they imply the local decision-makers are given the resources without specific dictates about how the resources can or cannot be used. Clearly, the Guatemala case holds many lessons for how government can set up mechanisms to allocate funds directly to communities to run schools.

Furthermore, when governments get more formally involved in supporting complementary education efforts, the public system cannot always assume the institutional responsibilities usually handled by NGOs. Most education systems do not demonstrate the capacities required to mobilize and support communities in forming school management committees and to regularly support those communities and the teachers they select. Part of what enables the complementary education programs in this study to succeed are the capabilities that the non-governmental organizations bring to the table. One cannot assume that government structures have or can develop those capabilities. Furthermore, to assemble the manpower needed to staff an on-the-ground network of community and school support services may surpass the institutional and financial capacity of the public sector. For example, in Guatemala, local NGOs were contracted by the government to provide teacher training and support services to PRONADE schools. However, when responsibility for teacher training reverted to the Ministry of Education, the amount of training decreased from 3-5 weeks per year provided by contracted NGOs to only three days per year through the ministry. NGOs may in fact be able to deploy field staff at lower costs than the public sector.
sector. At a minimum, in the cases included in this study, the NGOs demonstrated that they were able to effectively deploy the necessary networks of support personnel in ways that did not ruin the cost-effectiveness of the complementary education programs.

**Conclusion**

The nine complementary education programs included in this study are not aberrations. In fact, community-based models of primary schooling are a growing, world-wide phenomenon. For example, a quick review of available sources indicates that at least 25,000 community-based schools presently serve more than 3.5 million children in Sub-Saharan Africa alone. However, quality varies considerably among the variety of community-based schools. Thus, it is crucial to better understand the characteristics of programs that are more likely to achieve quality education for underserved populations.

The case studies suggest that EFA goals cannot be realized unless education systems are better able to reach poor, rural children. Not only do students who live in remote areas have less access to school, when schooling is available to them, it is often of poor quality. Models like those analyzed in this study show how countries can better organize schooling in areas usually least served by the formal education system. These cases also show how different approaches to school organization can ultimately lead to greater effectiveness through higher rates of attendance, completion, and learning.

The factors that most contribute to the success of the kinds of complementary programs reviewed in this study can be summarized as including:

- Smaller schools established in collaboration with communities;
- Locally recruited teachers supported through ongoing, regular supervision and training;
- School-based decision-making and community-based management and governance; and
- Simplified curriculum and increased instructional time devoted to basic literacy and numeracy.

The cases reviewed here indicate that any attempt to more broadly promote or adopt complementary programs should consider how best to assure these conditions remain. It is not enough to simply replicate the community-based schools concept. The experiences recorded in the nine models reviewed show that governments and their partners should invest the financial and institutional resources necessary to ensure that the conditions most favorable to success can be assembled and sustained. This implies drawing capacity from where it can best be found—asking government institutions to do what they do well, relying on NGO partners to do what they do best, and allowing communities to assume responsibility for what they can best manage.

The ultimate lesson from this research may be how governments can work in partnership with communities and civil society actors to improve school effectiveness through increased school autonomy, more frequent and systematic support for teachers and schools, and greater instructional time devoted to early literacy.
References


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