

A Cross-National Cost-Benefit Analysis of Complementary (Out-Of-School) Programs

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Abstract

This paper summarizes findings from case studies of School for Life in Ghana, Community Schools in Sikasso, Mali, and the Educatodos in Honduras. All three programs are designed and implemented by civil society actors but deliver schooling equivalent to the formal public curriculum. All three are more effective at providing access, completion, and learning than comparable levels of the public systems in each country. School for Life is over three times as cost effective as government schools in Ghana at producing a grade three completer. While Community schools in Mali have a unit costs 57 percent higher than public schools, the cost per completer is only 31 percent higher and the cost per learning outcome is only 10 percent higher. Educatodos is almost five times as cost effective as public schools at producing a grade six completer. For grades seven to nine, Educatodos has both a higher completion rate and much lower costs, making it 15 times as cost effective as the public system at producing a grade nine completer.

Introduction

One-third of the world's population lives in countries where the Education for All (EFA) goals of universal access, completion, and learning cannot be reached by 2015 solely through the linear expansion of existing public school systems. History clearly indicates that the growth of public schooling proceeds very slowly and inequitably. Data from 90 countries indicate that increasing enrollment from 50 percent to 90 percent required, on average, 58 years. There are no examples of countries climbing from 80 percent enrollment to 95 percent in 15 years. Clemens (2004, pp.13-14) asserts, "Reaching 95 percent enrollment by 2015 will require historically unprecedented growth rates."

With well-defined criteria for support, a clear set of metrics for evaluating sectoral policy and strategies, and a framework for aligning and committing external resources, the Fast Track Initiative (FTI) represents the best effort to date to respond to the monumental

challenge of mobilizing resources to educate the world's poorest children. However, the experiences of large-scale sector investment programs indicate that better use of additional resources is as much a challenge as mobilizing funding (Bruns, Mingat & Rakotomalala 2003). While the FTI calls for improved education sector policies and management, it does not call for a dramatic rethinking of strategies for providing education.

But dramatic rethinking is required if basic schooling will be provided to the populations that education systems are least able to serve. Across the developing world, the children not in school are the poorest, most isolated, and often the most victimized by historic patterns of discrimination. Universal and equitable access to quality basic education requires devising strategies to reach these underserved populations. The 2004 World Development Report states, "Too often [government] services fail poor people. They are often inaccessible or prohibitively expensive. But even when accessible, they are often dysfunctional, extremely low in quality, and unresponsive to the needs of a diverse clientele." Additional resources for expanding and improving the government public education systems in many countries will not, by themselves, address the problems in the great majority of schools in the most remote, poor, or disadvantaged areas. Entirely different approaches to governance, management, and accountability will also be required if quality basic education is to be made universally available (World Bank 2004, p.19).

Fortunately, there are examples of such different delivery systems. According to Farrell (2001), "Starting over 20 years ago, and gaining momentum over the past decade, there has been a quiet revolution in schooling in the 'developing' world, which is in many cases radically transforming the 'forms' of formal schooling as we have come to know them." As Farrell asserts, there are models and approaches to providing basic education that are showing how education can be provided to underserved populations. In Bangladesh, BRAC has graduated 2.5 million students from its rural schools. Escuela Nueva, with more than 20,000 schools, serves more than half of Columbia's rural areas. Guatemala's Nueva Escuela Unitaria program includes 1,300 schools. Community schools across rural Mali enroll over 200,000 students. Some 200 learning centers in Zambia serve 25,000 children, many orphaned because of HIV/AIDS. Egypt has community schools in more than 1,000 villages, serving some 25,000 children. Community-organized schools in northern Pakistan reach 53,000 girls.

Better understanding of these kinds of projects and programs, which have on-the-ground experience organizing quality basic education for underserved populations, has more to contribute to meeting EFA goals than another round of large-scale sector investment strategies that rely on infusions of resources, policy reforms, and ministry capacity building. This is not to say that resources, reforms, and capacity are not needed. In fact, research on complementary models will help clarify what resources are needed and show how they can be invested and managed differently. This research can also identify the policies that promote complementary and alternative approaches to providing basic education, as well as demonstrate how combinations of different capacities—governmental and nongovernmental, centralized and decentralized—can be mobilized, organized, and reinforced.

This paper presents the results of the first phase of a research project looking at large-

scale complementary models for providing basic education. It is relevant to FTI because it:

- (1) shows how complementary models affect access, completion, and learning;
- (2) sheds additional light on the financial requirements of EFA—not just for access, but also for achieving completion and learning;
- (3) provides examples of different ways to use and manage resources; and
- (4) provides insight into policy and institutional arrangements needed to more rapidly expand and improve the delivery of basic education.

The Cases

Data are available for analysis of three cases: Ghana, Honduras and Mali (DeStefano 2005, Hartwell 2005 and Schuh-Moore 2005). The three cases illustrate how complementary models respond to the challenges of meeting EFA goals in different contexts. These and other complementary education models have a number of common elements:

- (1) They are specifically designed to reach populations that are not adequately served by the formal system.
- (2) They provide a different means to deliver schooling equivalent to the formal public curriculum and are not meant as “non-formal” alternatives.
- (3) They are designed and implemented by civil society actors, with involvement and support from all levels of the education system.
- (4) They use alternative approaches to staffing, management, and accountability.
- (5) They operate on a scale large enough to exhibit some of the features of an education system (standardized approaches to teacher recruitment and training, systematized oversight and management, networking, accountability, etc.).

In Mali the government public school system still fails to serve the majority of school-age children, especially in certain regions. In Ghana, where access to basic education is much higher, one part of the country is persistently underserved. Honduras, like most of Latin America, has near universal access to primary schooling, but high rates of drop out before completion of basic education. The complementary models researched for this study were designed to respond to these problems.

Community Schools in Mali and School for Life in Ghana are examples where an NGO initiative led to the development and implementation of programs aimed at specific regions. In both cases, access to basic education in the target regions—the Northern Region in Ghana, and Sikasso in Mali—was very limited. The NGO programs grew up as alternative ways to organize and operate schools meant to be equivalent to the primary education offered in official public schools. The *Educatodos* program in Honduras is intended to provide an opportunity for students who have dropped out of school to obtain basic education through alternative means, providing learning opportunities to students mostly over the age of 20 in centers scattered throughout the country in homes, factories, businesses, schools, and community centers.

Analysis of the Cases

The cases included in this study are examined to answer the following questions:

- (1) Do they contribute to EFA goals of access, completion and learning?
- (2) Do they do so in ways that are cost effective?

The research has several potential implications for the EFA-FTI. Data regarding the impact and cost effectiveness of proven approaches to providing basic education to underserved populations are vital. Analyses of costs per student enrolled, per basic education completer, and per student achieving a desired learning outcome provide additional insight into the full financial requirements for meeting the EFA goals. Comparisons of these measures of cost effectiveness and of those for government-run schools inform the dialogue about how best to estimate the amount of resources needed to reach not just universal access, but also universal completion and a desired level of learning achievement. Furthermore, the organization and operation of these complementary education systems helps identify the institutional arrangements and capacities needed to help education succeed in meeting the EFA goals.

Data on each of these cases, as well as on the government provision of schooling in the three countries, was gathered from secondary sources¹. Some data are more reliable than others, depending on the source, completeness, and the time period. For this reason, these results are indicative and cannot be taken as precise calculations of true impact or cost effectiveness.

Summary of Findings: Costs and Cost-Effectiveness

In each of the cases being studied, costs have been assessed in absolute terms, as well as with respect to the contributions being made to the EFA goals of access, completion and learning. How cost effectively do the models studied contribute to EFA? Table 1 summarizes how costs have been evaluated in relation to the three goals, and compares each program's cost-effectiveness to the best available estimate of the cost effectiveness of the equivalent level of the public system. The cost of access is measured as the cost of providing a space for a child for each year of schooling. The cost of completion is calculated by multiplying the annual per student cost by the number of years for a given level of schooling and then dividing by the percentage of those who complete the level. The cost of producing a learning outcome is based on the percentages of those completing the level of schooling and demonstrating the desired level of learning (Table 1)².

¹ These include project documents for the School for Life project in Ghana, the Save the Children community schools project in Mali, and the Educatodos project in Honduras. See the three EQUIP case studies for detailed information on source documents (DeStefano 2005, Hartwell 2005 and Schuh-Moore 2005).

Table 1. Cost of Producing a Learning Outcome

	Access per student, per year enrolled	Completion per student completing a specified grade	Learning per student demonstrating learning
Ghana—School for Life	\$39	\$43	\$52
Ghana—Public Schools	\$27	\$135	\$1,500
Mali—Community Schools	\$47	\$421	\$825
Mali—Public Schools	\$30	\$322	\$749
Honduras—Educatodos 7-9	\$80	\$180	--
Honduras—Public Schools 7-9	\$234	\$2,736	--

Source: Computed by authors based on data from DeStefano (2005), Hartwell (2005) and Schuh-Moore (2005).

Given the questionable validity of sub-national data, and the problems associated with comparing different measures of student learning, the figures above are not meant to be precise, but rather to indicate a pattern. They indicate that, given existing levels of efficiency, many more resources will be needed to achieve completion and learning than are needed to just achieve access. Given the current rates at which enrolled students continue on and complete a given grade level and actually acquire a demonstrable level of learning, the costs per completer and per unit of learning far outstrip the cost of providing access. For example, in public schools in Ghana, it costs almost four times as much to produce a third-grade completer than it does to enroll a student for a year. When learning is taken into account, the effect is even more pronounced. The question worth considering is how can we begin to estimate the resources required, not just to achieve access goals, but to attain universal completion and learning? Furthermore, how can innovative approaches to organizing schooling better and more cost-effectively assure completion and learning?

As an example, School for Life is shorter and more educationally effective, and therefore has dramatically lower costs for completion and learning than the public schools in Ghana. The program therefore holds promise for thinking differently about how to organize access to basic education. Educatodos also offers a condensed, more efficient, and therefore less costly approach to increasing access to basic education. Community schools in Mali are more costly, but more effective. They may more accurately reflect the costs associated with providing a viable basic education to populations outside the range of the public system.

The analyses completed for this study also indicate how complementary or alternative

² The cost per learning outcome for public schools in Ghana is based on data showing that 8.7 percent of sixth graders achieve minimum competency in English. We applied that rate of language proficiency to third graders to obtain a comparable cost of learning. Arguably, if only 8.7 percent of sixth graders are proficient, then even fewer third graders would be, making this an underestimation of the cost of learning for grade three. Learning in Mali is based on the CEP pass rate for sixth graders.

models for providing access to basic education can affect achievement of EFA goals. Therefore, they also present possible complementary investment strategies. Resources that promote or extend a diversity of models for providing quality basic education to underserved populations may contribute more to achieving the EFA goals of access, completion, and learning than those spent on linear expansion of the public school system. The two Figures below illustrate this.

Figure 1 compares each program in terms of its potential contribution to completion and learning. In each case, except the primary program in Honduras, for every 1,000 students enrolled, the complementary models produce more completion and, where measures are available, more learning.

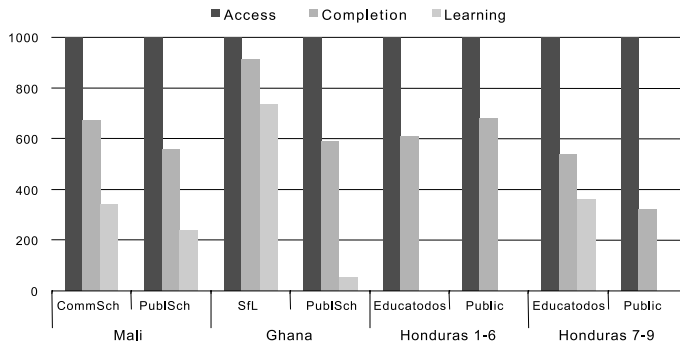
Figure 2 takes into account the costs of public and program schools. It shows the results that could be achieved for every \$1 million spent in terms of the number of students enrolling, completing, and demonstrating learning. While the data are too imprecise to allow confidence in accuracy of the calculations, they do indicate comparisons that are useful to make when considering sector investment strategies and the comparative impact and effectiveness of different investments. For example, \$1 million dollars spent on school life in Ghana appear to buy more third grade completion and learning than the same amount spent on expanding the existing provision of primary schooling. Resources used to organize community-based provision of schooling like School for Life may make more of a contribution to reaching the EFA goals than those same resources used to expand the prevailing government model. Discussion of whether the EFA goals can be reached by 2015 and consideration of the resource requirements and investments needed to take the best possible shot at meeting those goals needs to include this kind of analysis and careful research and review of the experience of complementary and alternative approaches to providing basic education.

Summary of Findings: Access and Completion

The previous section looked at the overall findings of our research in terms of the cost-effectiveness of the three complementary approaches to basic education compared to the public school systems in their respective countries. This section examines the specific contributions each complementary approach has made to increasing access and completion.

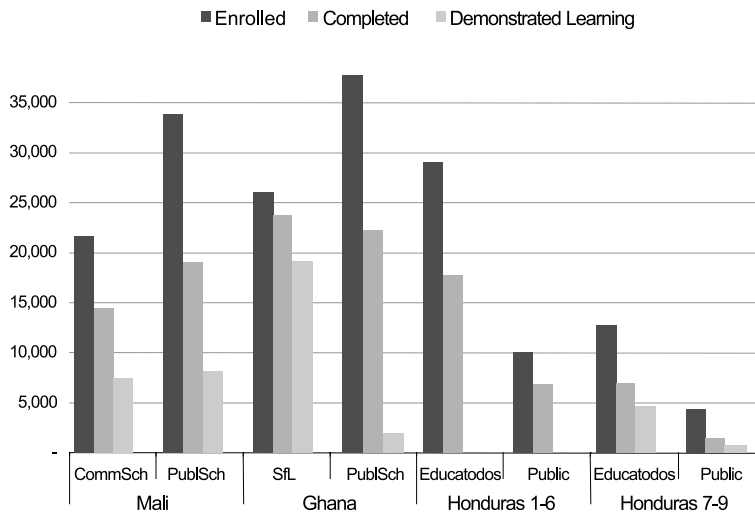
Each project studied has increased access and completion for the underserved populations they target. Access is examined in terms of the enrollment provided for target populations, and completion is evaluated on the basis of the percentage of enrollees that complete the educational program—reaching sixth grade in a community school in Mali, successfully finishing the nine-month equivalent of third grade in Ghana, and reaching the *Educatodos* equivalents of grades six and nine in Honduras.

Figure 1. Effectiveness for Every 1,000 Students Enrolled



Source: Computed by authors based on data from DeStefano (2005), Hartwell (2005) and Schuh-Moore (2005)

Figure 2. Cost-Effectiveness Results for Every US1 Million Spent



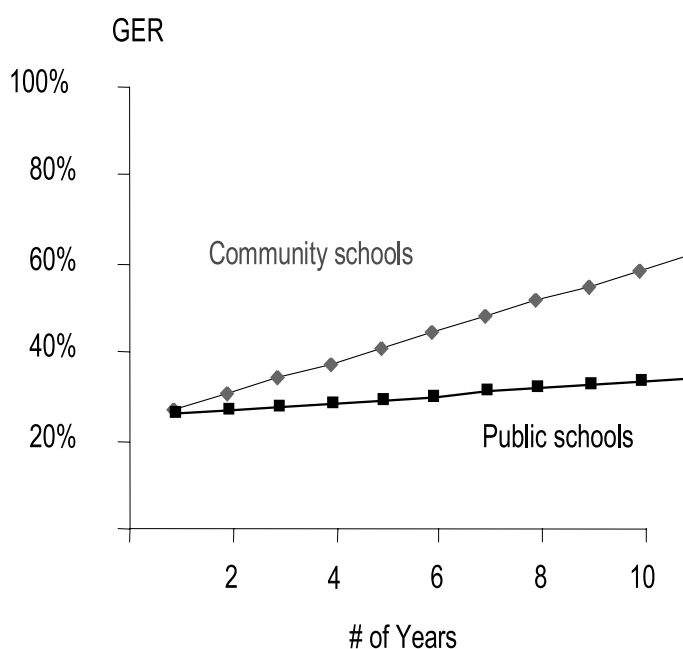
Source: Computed by authors based on data from DeStefano (2005), Hartwell (2005) and Schuh-Moore (2005).

Mali

Government schooling in Mali has grown at a fast pace over the last decade but still only accommodates 44 percent of students ages seven to 12. During that period, community schools have grown at an even faster rate. In 2003, the community schools added an additional 230,000 primary school places and increased the primary gross enrollment rate to 56 percent (Ministry of Education, Mali 2003)³. Public schools in Mali in 2002-2003 had a gross intake capacity in first grade equivalent to 46 percent of the seven year old population and a net admission rate of 39 percent. Community schools increased the net admission rate considerably, to 53 percent (and gross intake capacity to 61 percent), in 2002-2003 (Ministry of Education, Mali 2003).

The expansion of access in the region of Sikasso from 1993 to 2003 is shown in Figure 3. In 1992, the primary school gross enrollment rate in Sikasso was 27 percent. At that time, the contribution of community schools was negligible -- four community schools

Figure 3. Sikasso: The Impact of Community Schools



Source: DeStefano (2005)

³ Additional 200,000 primary school students are enrolled in private schools and madrasas, bringing the total gross enrollment rate to 67 percent for the country.

enrolled 240 students. The public sector did expand during the ensuing decade, growing slowly to achieve a 35 percent gross enrollment rate in 2003. The additional enrollment offered by community schools in Sikasso greatly increased the rate of expansion of access, and enabled gross enrollment in 2003 to be 62 percent. In ten years community schooling in Sikasso grew from four to 900 schools. Without community schooling gross enrollment increased at an average of only 0.8 percent per year. With them, it grew at an average of 3.5 percent each year, a rate that would allow Sikasso to reach 100 percent enrollment in 14 more years.

In villages with community schools, the gross admission rate into primary school reached 96 percent in 2003. For public schools in Sikasso, the rate is 48 percent. An estimated 56 percent of those admitted to first grade make it to sixth grade in public schools; for girls that figure is an estimated 49 percent. Community schools in Sikasso report a grade six completion rate of 67 percent (57 percent for girls). Community schools are 20 percent more effective overall at producing completers, and 16 percent more effective for girls.⁴

Ghana

From 1990 to 2000 Ghana's primary education gross enrollment rate climbed from 75 percent to 89 percent. Since 2000, that number has slipped back to 80 percent as expansion of schooling has failed to keep pace with the growing school-age population. The Northern Region has persistently had a rate of access to basic education much lower than the national average. From 1990 to 2000 the gross enrollment rate in public schools in the Northern Region increased from 51 to 60 percent (Ministry of Education, Ghana 2000). School for Life targets villages where there is no formal school or where enrollment in basic education is extremely low. It provides schooling in 767 communities, reaching approximately 25 percent of the villages in eight districts of Northern Region. In each of the last five years, School for Life has averaged 9,000 enrollees in its nine-month version of grades one to three, and 91 percent of children who enroll complete the program. Of those who complete, 66 percent continue to fourth grade in a formal school. In the public schools in Northern Region, 48 percent of students who enter first grade make it to fourth grade. Figure 4 illustrates how School for Life increases fourth grade attainment in Northern Region by over 60 percent.⁵

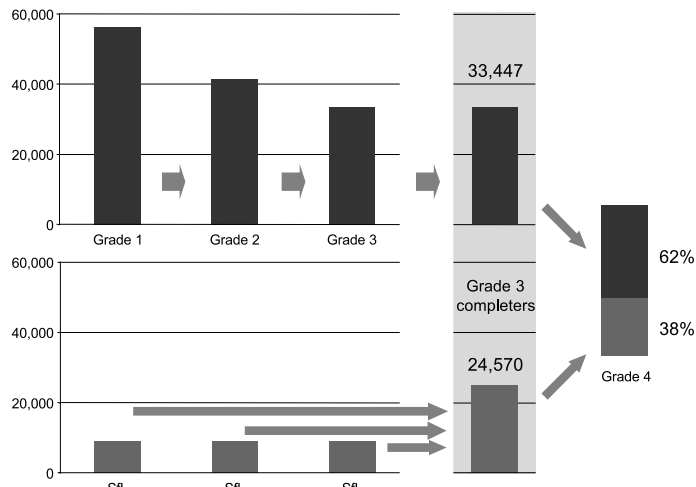
Honduras

Up-to-date data on education in Honduras is difficult to obtain, because many records were destroyed in a hurricane. Available data show a net enrollment rate for grades one to six of 87 percent in 2001. Net enrollment drops off considerably after sixth grade, with only

⁴ Government completion figures are based on a synthetic cohort analysis (net repeaters) using 2002-03 data from the Ministry of Education. Save the Children community school completion figures are as reported in Antenne du Sahel, *Annuaire statistique des écoles communautaires, rentrée scolaire 2002-2003* (Save the Children/USA, Program du Mali).

⁵ Data are from GES statistics department, Regional Education Office, and School for Life documents.

Figure 4. Contributions of Public Schools and Schools for Life to Fourth Grade Enrollment

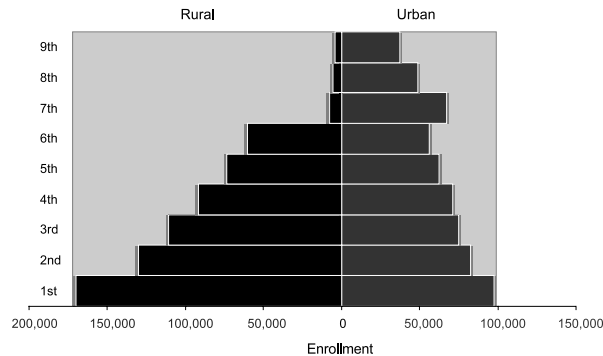


Source: Computed by authors based on Hartwell (2005)

29 percent of 13 to 18 year olds in grades seven to 12. Figure 5 shows how dropout increases as students move through the basic education cycle, especially in rural regions. Access to basic education in Honduras is thus less of a problem than persistence through the full cycle. To build its human resource base, Honduras needs to consider what to do with the students who drop out before completing the nine years of basic education.

Educatodos targets youth and young adults who have dropped out before completing nine years of basic education, and older adults seeking alternative means to obtain the basic education they failed to complete as children. Approximately one-third of Educatodos enrollment is under age 20, another third is 20 to 30 years old, and the remaining one-third

Figure 5. Basic Education Enrollments in Honduras, 1999-2000



Source: Schuh-Moore (2005)

is over 30. Over 80 percent of Educatodos learning centers for grades one to six are in rural regions.

In 2003, Educatodos enrolled 117,656 students, 13,000 in grades seven to nine, and the remainder in the grades one to six-equivalent program. Since its inception in 1996, Educatodos has enrolled over 500,000 students. Rates of completion for the primary program and for public primary schools are both between 60 and 70 percent. The Educatodos grades seven to nine-equivalent program began in 2001 and has enrolled approximately 23,500 students since then. Of those enrolled, on average 54 percent complete ninth grade, compared to 32 percent in public schools.

Findings: Comparative Costs of Programs

All three programs provide access and contribute to completion for the underserved populations that they target. But what is the price of that access and completion? This portion of the study presents the cost of each of these programs as well as the public-sector cost of providing access to comparable levels of basic education in each country. Costs are analyzed from the perspective of the total cost of running each program, as well as the cost per student, and presented in the table below.

Total costs are indicative of the full resource requirement for mounting and running these kinds of complementary programs. In Mali, the full budget for operating the Save the Children project in the 1990s was reviewed, including the costs for both starting and running the schools, and including all contributions from donors, government, NGOs, and communities⁶. Recurrent costs are distinguished from total costs as a means to show what it costs to operate the projects once they are up and running. Total recurrent costs are then translated into unit operating costs per student. As a point of comparison, unit costs within the public system are also calculated and reported in Table 2. These unit costs are based on national recurrent expenditures on basic education divided by the total enrollment in the indicated grades.

In Ghana and Mali, costs per student in the complementary approaches are higher than the estimated unit costs for public schools. However, these two projects—by design—are reaching students not served by public schools. If the traditional government system were to provide access to these students—developing schools, supporting and maintaining supervisory functions, and assigning and keeping teachers in hard-to-reach areas—the government’s per student costs would likely increase. The projects in Ghana and Mali represent the best available estimates of what it actually costs to provide schooling in underserved regions. In contrast, Educatodos has costs considerably lower than those of formal schools at both the primary and lower secondary levels.

⁶ For detailed discussion of costs of Save the Children schools in the 1990s see Karen Tietjen, *Community Schools in Mali: A Comparative Cost Study* (Washington, D.C.: USAID, 1999).

Table 2. Recurrent Costs per Student for Complementary Schools and Public Schools

	Complementary Approach			Comparable Level in Public System
	Total Costs (1)	Total Recurrent Costs (2)	Recurrent Cost per Student	Recurrent Cost per Student
Mali (3)	\$3 million	\$2.6 million	\$47	\$30
Ghana	\$3 million	\$1.6 million	\$39	\$27
Honduras 1-6	\$18.6 million	\$13.6 million	\$40 (4)	\$102
Honduras 7-9	\$7.6 million	\$1.1 million	\$80	\$292

Source: Computed by authors.

Notes: (1) Total costs include recurrent costs, donor investments, development costs, and capital costs.

(2) Recurrent costs are the recurring operational costs of running the program, but does not include any NGO or donor investments, development costs, or capital costs.

(3) Costs are from 2002-03.

(4) This calculation is based on recurrent costs only for students who stay in the program.

In Mali, 90 percent of the total costs of the Save the Children community schools were covered by a USAID grant. Communities contributed about seven percent, and Save the Children contributed three percent. Ministry contributions were negligible. The Ghana Danish Communities Association covers almost all the costs of School for Life. Educatodos is roughly two-thirds funded by USAID, and one-third by the Ministry of Education.

Findings: Cost Effectiveness of the Programs

Cost effectiveness is examined from two perspectives. First, unit costs are translated into costs per student completing the indicated level of education. In the case of Mali, this involves comparing the cost of producing a student with grade six completion in community and public schools. For Honduras, grade six and nine completion in Educatodos are compared to grade six and nine completion in the public system. In Ghana, since School for Life goes only to third grade, costs for producing a grade three completer in the public schools are compared to costs per completer in School for Life. Table 3 presents the results of these analyses.

In Ghana, School for Life is over three times as cost effective as public schools at producing students with the equivalent of third-grade completion, in part because 91 percent of students complete School for Life's nine-month program, but only 59 percent of students make it through three years of public schooling.

In contrast, Mali's community schools are less cost effective at producing grade six completers than the government schools. However, since community schools have higher completion rates, their lower cost effectiveness is due exclusively to their higher unit costs.

Two things are of interest in looking at this case. First, community schools, as demonstrated earlier, are serving a population that otherwise would not have access to school. This must be compared to what it would cost the government to extend access to the villages served by community schools, not just the cost of running the existing system. Second, community schools opted to copy the six-year cycle of the government schools (unlike School for Life), perhaps missing an opportunity to model a shorter path to attainment of a grade six-equivalent education.

Table 3. Cost per Completed Student

	Completion Rate	Cost per Completing Student
Ghana—School for Life	91%	\$43
Ghana—Public Schools	59%	\$142
Mali—Community Schools	67%	\$421
Mali—Public Schools	56%	\$322
Honduras—Educatodos 1-6	61%	\$197
Honduras—Public Schools 1-6	68%	\$903
Honduras—Educatodos 7-9	54%	\$180
Honduras—Public Schools 7-9	32%	\$2,736

Source: Computed by authors

In Honduras, Educatodos has similar completion rates to the government system but costs less per student and takes three years (instead of six) to complete. As shown in Table 3, Educatodos is therefore almost five times as cost effective as the public schools at producing a sixth-grade completer. For grades seven to nine, Educatodos has a higher completion rate and much lower costs, making it 15 times as cost effective as the public system at producing a ninth-grade completer. Admittedly, Educatodos serves a dramatically different student body, almost all above primary school age. Nevertheless, it demonstrates a cost effective way to help young adults recapture schooling they were not able to obtain as children.

In addition to cost per completer, this study analyzes the cost per student demonstrating a desired learning outcome. Data from systematic testing and evaluation of student performance related to literacy and math are only available for the School for Life and Educatodos programs. For Mali, we rely on pass rates of students on the primary education leaving exam (CEP).

In 2003, School for Life requested that the Ghana Education Service (GES) test its pupils toward the end of the nine-month cycle. The tests showed that 52 percent of the children read with comprehension, write, and calculate with mastery (defined as at third-grade level) (School for Life 2004). If we define proficient as ability to read and calculate well, then 81 percent of School for Life students met that target. This translates into a cost

per learning outcome of \$52 per student. Data on student learning in public schools in Ghana are limited. Results from annual test given to a 10 percent national sample of students in sixth grade show only 9 percent of the sixth grade students achieved minimum competency level in English. If we assume that same percentage of third graders meeting a competency standard in language, the cost per learning outcome at that level for the public schools would be \$1,500.

CEP pass rates in Sikasso, Mali in 2003 for government schools were 43 percent⁷, compared to 51 percent in the community schools. These translate into costs per learning outcome of \$749 and \$825 per student for the public and community schools respectively. When considering the cost effectiveness of community schools in Mali, it is interesting to note that unit cost in those schools is 57 percent higher than in public schools, but the cost per completer is only 31 percent higher, and the cost per learning outcome is only 10 percent higher. This is because community schools are more effective at producing sixth-grade completers who can pass the CEP.

In Honduras, data are available on student learning in grades seven to nine. An external evaluation was conducted of *Educatodos* to measure student learning in comparison to students in the traditional system. Sixty-seven percent of grade seven to nine students at the *Educatodos* pilot centers achieved mastery in Spanish⁸, compared to 62 percent in the government schools. Results in both cases declined significantly when students were evaluated with respect to sixth and seventh grade standards. In reviewing these results, it is important to note that *Educatodos* uses a program that integrates the academic subjects within content areas or themes. The results, therefore, provide evidence that students are learning core subjects within an integrated approach. Because of the limitations in the data, costs per learning outcome could not be calculated⁹.

Implications for FTI

The three cases presented here as an initial phase of research into complementary models for providing basic education to underserved populations show how different supply models can contribute to achieving EFA goals—and do so relatively cost effectively. We believe this research has implications for the FTI in terms of:

- (1) how analysis of the requirements for achieving EFA are conducted;
- (2) the nature of education sector policies and strategies needed to achieve EFA; and
- (3) acceptance of complementary approaches as equivalent to government schooling and as viable and necessary strategies for achieving EFA.

⁷ Based on data available for one subregion in Sikasso (Save the Children 2003).

⁸ Defined as equivalent to a grade 4 level of Spanish.

⁹ Caution should be taken in interpreting these results comparatively. Students took this test in seventh grade of both the *Educatodos* program and the government system. However, it is not clear whether the students in the *Educatodos* program had been long-time participants or had completed grades one to six in the public system. As a result, the only learning outcomes attributable directly to the *Educatodos* program were the increases in learning that occurred for students in pilot centers.

From an analytical standpoint, this research contributes two perspectives worth considering. First, progress toward EFA needs to be examined not just in terms of national-level changes in access and completion; it must also be evaluated in terms of how underserved regions and populations make progress toward EFA goals. In all countries, achieving EFA means creating the institutional arrangements that can ensure delivery of educational services to underserved populations. This means rural, poor (and often female) children, as well as children, young adults, and older citizens who dropped out of school. Evaluation of any country's EFA status, as well as its strategies for progress, has to include analysis of sub-national data. Such analysis needs to identify and assess underserved populations and regions so that specific strategies for extending access and assuring completion among those targeted can be developed. Effectiveness in meeting EFA goals can therefore be evaluated in terms of the additional access, completion, and learning obtained for the targeted populations.

Second, methodologies for analyzing the costs and cost effectiveness of complementary approaches to providing access, completion, and learning to target populations need to be developed, tested, and applied. These methodologies make it possible to more fully evaluate the financing requirements for achieving EFA. In addition, comparisons of strategies for expanding and improving basic education could also include evaluation of the costs per completer or costs per learning outcome as a way to make judgments about how best to use investment dollars. As demonstrated in Ghana and Honduras, complementary education programs that provide condensed versions of basic education are likely to be more cost effective. Even if their completion rates are comparable to public schools, a shorter route will cost less, even if unit costs are higher. As demonstrated in Ghana and Mali, where unit costs for community schools are higher than public schools, it is important to extract from these models an understanding of the full costs of reaching underserved areas. One should not assume that the prevailing government unit cost will hold across all populations or regions.

Concerning education sector policies and strategies, research into complementary models of education offers insight into how different approaches can contribute to EFA goals and how different capacities and resources can be mobilized to support those approaches. Specifically, FTI needs to consider how nontraditional provision of education can figure into country strategies for reaching EFA. Large amounts of additional resources are needed to achieve EFA in FTI countries. However, achieving EFA will depend primarily on whether those resources are invested so that the existing system does things differently. Put another way, investment needs to bring other capacities, other approaches, and other actors to bear on the challenge of EFA. All the complementary models being researched for this and subsequent studies show that it takes a combination of efforts and actors to successfully provide basic education to underserved populations. These programs all worked closely with government systems but also drew on the human and financial resources of communities, civil society organizations, and private charities.

In case after case, complementary approaches have been successfully organized because they rely on several actors that include, but are far from limited to, the national system of education—communities, local and international NGOs and education authorities, and

providers of external assistance. To take advantage of these kinds of experiences, government policy needs to make a decided shift away from administering and enforcing a single-supply model and move toward a pluralistic approach. Simply put, if the prevailing model for basic schooling continues to fail to meet the needs of specific segments of the population, then as a matter of public policy, the government needs to seek out and encourage the development of other models, drawing on other resources and capacities-or on alternatives that have proven their efficacy.

In an FTI context focused on budgetary support for government-led sector investment strategies, the pluralism inherent in the community school experience argues for including the negotiation of complementary roles and responsibilities within a sectoral framework. Education sector policy needs to explicitly create space and mechanisms for public-private interaction and collaboration.

If donor countries operating within the framework of FTI are going to funnel resources through national education budgets, it becomes even more important to develop policies and procedures that will allow the public sector to enter into and manage relationships with nongovernmental actors, be they international or local NGOs, or communities themselves. Experience indicates that ministries of education are often unwilling to cede so much control and authority to local or nongovernmental actors; or when they are willing, they are usually inexperienced and need to develop new systems and modes of operation to be able to make those relationships work effectively. This includes collaborating on developing alternative approaches to teacher recruitment, teacher support, curriculum, school management, and community-school interaction. It may also include contracting for services, allocating and disbursing government funds to private entities, setting up mechanisms for oversight and accountability, and collecting sound and consistent information.

In addition to the different public-private interaction, complementary programs in many instances have modeled inherently decentralized systems of schooling. NGOs have worked directly with communities and with local governments and education authorities to run their projects. The relationships at the local level are, in fact, a large contributing factor to the ability of these projects to operate and flourish. The highly centralized systems of administration and management that are the norm in most low-income countries could benefit a lot from looking at how decentralization has worked in the context of some large-scale complementary education projects. In the case of Mali, this has even included local authorities creating mechanisms for generating resources for basic education¹⁰. Control and decision making authority are what make it possible to raise and use resources effectively locally as well as to monitor teacher and school performance. Surveys of one group of community school management committees in Mali found that more than three-quarters regularly checked on student and teacher attendance. In addition, they raised and spent an average \$159 per school (Save the Children 2004).

¹⁰ For example, some villages allocated a fixed percentage of the revenue generated from cotton sales to support their community school.

More decentralized strategies that draw on and make use of a variety of governmental and nongovernmental actors require dramatically different capacity in the private and public sectors. For example, NGOs may have the experience and on-the-ground presence required to effectively engage communities and parents and help them set up the necessary structures to open and operate schools—and to do so using proven participatory methodologies. Rare are the government officials who have these tendencies or skills. On the other hand, government officials would have important roles to play in negotiating relationships, translating those relationships into contractual obligations, and monitoring the fulfillment of the terms of those contracts. (These roles are often played by donors when complementary models are promoted through projects.) Decentralization efforts usually focus more on building the capacity of local education authorities to administer state-run systems. Thus, these efforts would need to shift to building the capacity of local authorities to manage relationships rather than on their capacity to directly run the education system. A variety of approaches must be deployed to meet the range of needs present across communities. Education authorities must therefore abandon the prevailing goal of assuring the consistent delivery of a single supply model. However, this will not occur without significant investment in a changed framework and a new set of capacities—at the central ministry level and, more importantly, throughout the decentralized education administration system.

For their part, private nongovernmental actors need to build their capacity to implement projects and assure high levels of quality. It also implies that nongovernmental agencies need to think more broadly about their roles within developing countries. If NGO provision of schooling is going to be progressively incorporated into the public education system, NGOs should no longer define their mission as filling the space left vacant by government. They need to think critically about how their actions could enhance and extend public-sector capacity. The experience of USAID and Save the Children in Mali may, in fact, illustrate an opportunity missed to make this kind of shift in government-NGO relationships.

The lesson of complementary models is that basic education can be organized through different approaches that rely more on local and nongovernmental actors than the formal system. The challenge is finding ways to incorporate these strategies into the sector investment programs that draw the bulk of government and external financing and attention. What the case examples show is that complementary models contribute to EFA goals primarily by targeting underserved populations. These examples are modeling more democratic and decentralized approaches to providing schooling. While in some cases they are able to provide quality similar to public schools, they have yet to prove that they can deliver high-quality education. The next decade should therefore focus on how to use sector investment strategies not only accommodate and expand complementary approaches to basic education, but also how to ratchet up their quality.

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