

Quality Education in Developing Countries Grantmaking Strategy

1. INTRODUCTION

The Hewlett Foundation's Global Development Program strategy includes the Quality Education in Developing Countries (QEDC) Initiative as one of its components. That strategy identifies the conditions, drivers, and areas of emphasis for the QEDC initiative financed by both the Hewlett and the Gates Foundations. This paper describes a more detailed grantmaking strategy in three areas of investment: more attention to and accountability for learning, proven instructional models, and sufficient resources used effectively. By 2010, the QEDC initiative aims to have a portfolio of funded activities that, together, will improve student learning and drive education reform efforts in East and West Africa and India. Students in project areas will be learning more; governments, civil society, and donors will be able to measure whether students are learning and will pay more attention to learning outcomes; and policymakers will use information about what improves learning outcomes to decide how funds for education are allocated.

In what follows, we first describe the importance of this work. Next we specify the goals for our grantmaking. We then define the factors necessary for achieving our goals and identify the particular strategies that we pursue. To do so, we outline the barriers our grantmaking strategies are intended to address. Finally, we describe our underlying theory of change as to how the quality of education in developing countries can be improved.

2. THE IMPORTANCE OF IMPROVING QUALITY

2.1. Quality Matters

Education has long been acknowledged as one of the linchpins to improve the lives of the very poor. Longitudinal data from a cross-section of 138 countries shows that women with more years of education have dramatically lower fertility rates.ⁱ Furthermore, the positive effects of education are intergenerational: the children of educated mothers fare much better on well-being indicators than the children of uneducated mothers.ⁱⁱ Newer evidence documents that in poor countries, as the quality of education rises, the returns on going to school also rise. For example, many studies show a strong relationship between educational quality and wages. In a study in South Africa, a one standard deviation increase in test scores accounted for 35.5 percent higher wages; even in other countries with less-developed economies, wages were between 10 and 22 percent higher for each standard deviation increase in test results.^{iii iv}

When accompanied by other reforms, education can be the primary tool for improving students' abilities to be productive members of society, which in turn gives individuals the tools they need to lift themselves out of poverty. As many African countries are working to end extreme poverty and have the youngest population structures in the world, these societies, in particular, must deliver quality education for all children for their nations to flourish.

2.2. Learning Outcomes Are Low in Sub-Saharan Africa and India

For the first time in history, significant numbers of the poorest children—especially girls and other educationally disadvantaged groups—are going to school, but too few are learning. The global targets set by the Education for All goals and the United Nation’s *Millennium Development Goals* have succeeded in focusing donor and government attention and investment on making sure that more children go to school. As a result, in the two poorest regions of the world, student enrollments have dramatically increased over the past decade. In South Asia, almost 30 million new students have entered the education system since 1999, and in sub-Saharan Africa, more than 20 million new students enrolled in the same period.^v

Many of these new students come from the poorest households, are often the first in their families to go to school, and come disproportionately from rural areas. While such rapid growth is laudable and unprecedented, this massive expansion of schooling has significantly strained existing education systems. Teacher and facility shortages are acute; student/staff ratios are high in sub-Saharan Africa (47:1) and South Asia (35:1), as compared with developed countries (17:1). According to a 2006 report issued by UNESCO, sub-Saharan Africa will need to hire 1.6 million new teachers in less than a decade just to *keep pace* with current levels of enrollments.^{vi} What these system-wide statistics do not show are differences by grade: grade one, two, and three classrooms often hold the most students, some as many as 100 students in one room. The statistics also do not reveal issues that are perhaps more threatening than the shortages of teachers and facilities. Among these are the lack of effective teaching practice and very little attention to and accountability for student learning among teachers and education managers.

In short, quality is suffering: millions are entering the doors of school for the first time, but too few are learning. Although children are expected to be able to read fluently by the end of three years in school, grade-level testing indicates that even by Grade 6, many students still cannot read or do basic math. For example:

- **In Zambia**, only 25 percent of Grade 6 pupils demonstrated minimum literacy.^{vii}
- **In Nigeria**, 40 percent of Grade 4 students were unable to copy a single word or punctuation mark correctly from a five-line passage.^{viii}
- **In Malawi**, only 22 percent of Grade 6 students demonstrated minimum literacy.^{ix}
- **In Ghana**, Grade 6 performance on a very simple multiple-choice reading test was as low as what one would expect from random guessing.^x
- **In India**, 50 percent of children enrolled in Standard II to V in government primary schools could not solve two-digit subtraction.^{xi}

2.3. Improving Quality is Urgent

In the past decade, millions of poor families have sacrificed scarce family income to put their children in school in the hopes that education will put young students on a pathway out of poverty. Ensuring a return on these investments is now imperative. However, students will not be able to participate and succeed in the growing economies of the developing world if they do

not learn in school. As former World Bank Chief Economist Francois Bourguignon recently pointed out, “considerable progress has indeed been made recently in increasing enrollment, but a reversal could occur if parents were to realize that the quality of schooling is not guaranteeing a solid economic return for their children.”^{xii} Happily, governments and development agencies are beginning to understand the urgent need to address poor educational quality and the QEDC initiative has an opportunity to significantly influence the work of others through strategic investments in this area. Simply put, the stakes are high, and now is the time for investments in universal quality education.

3. FOCUS ON THE LOWER GRADES OF PRIMARY SCHOOL

Strong evidence suggests that improvements in student learning in the first years of schooling, in particular, will be critical in addressing the dismal statistics cited above. The learning that occurs in the lower grades of primary schools is likely to have the greatest returns for learning outcomes overall, especially if children start school at the right age. In these early grades, children learn to read and form learning habits for later in life. Skills like literacy and numeracy are foundational skills that, once acquired, are used to continue learning other subjects. The evidence confirms this—early literacy acquisition is a good predictor of later educational success.^{xiii} Furthermore, reading is a skill that sticks. A child who becomes a fluent reader in the first few years of schooling is unlikely to lose this skill even if he or she drops out.^{xiv}

Whether children learn in their first years of schooling can also be a significant determinant of whether they stay in school. Couple this with the fact that student dropout rates in many countries throughout sub-Saharan Africa and India are among their highest in the *first three grades* of primary school, and the following proposition becomes obvious: if school systems successfully teach basic skills in lower primary, students are more likely to enroll in school, to enjoy the experience, and to remain longer. That is, there is no real tradeoff between providing students with access to education and providing students with a quality education. In fact, one may expect that improving quality education in the early grades will increase student retention and completion rates.

Another strategic reason for focusing on skill acquisition in the first years of primary is that effective interventions can lead to dramatic improvements in student learning within a very short period of time. When positive results materialize quickly, the system as a whole is more motivated to change.

Finally, improving learning in the lower primary grades means not only boosting the learning chances of millions of students, it also means making better use of the millions of dollars of scarce resources wasted when students drop out of school having learned little or nothing. Given the crucial importance of learning in lower primary, QEDC’s grantmaking strategy is focused on teaching children to read, calculate, and think critically by the third grade. The remainder of this paper describes how QEDC is pursuing this critical objective.

4. IDENTIFYING AREAS FOR GRANTMAKING

4.1. Factors that Affect Learning

QEDC has identified four essential factors that will contribute significantly to improved learning outcomes—defined as increased literacy, numeracy and critical thinking by the third grade—for children living in extreme poverty. These factors, depicted in Figure 1, include:

1. **Supporting enrollment and retention** through family recognition of the importance of schooling and societal conditions that reinforce this.
2. **Increasing access** to schooling by ensuring that tuition and other fees are low and there are quality school facilities sufficiently close to students’ homes.
3. **Improving quality** in schools with the right inputs and processes in place to ensure learning happens inside of the classroom. The following factors are especially important to the teaching-learning process in the classroom: appropriate curriculum and pedagogy, sufficient materials, quality formative assessment tools, sufficient quality teachers, and sufficient time in class. In addition, effective school leadership and the basic nutrition and health of students are important influences on quality education.
4. **Improving institutional funding and management practices** that ensure the proper incentives are in place to support the previous three factors. Key policies and practices include the way finances flow for schooling and how those finances get disbursed to and used in schools, teacher standards and training, school construction, curriculum development, national examinations, school governance, and public oversight of education system performance.

Each factor is necessary, but not sufficient, to achieve QEDC’s target outcome.

Figure 1

Framework of Factors that Influence Whether Students Learn



4.2. Factors that Require Our Attention

All of the factors discussed above are critical to ensure that students learn. Governments and donors are already giving significant attention to the first two factors discussed; namely, ensuring that students have access to enroll and can afford to stay in school. In fact, the bulk of donor funding for the Education for All (EFA) movement has been allocated to increase access for students. By and large, governments have pursued these priorities by issuing policies to help ensure that adequate inputs are provided. Such policies have met with significant success: more schools have been built, more textbooks have been delivered, and more teachers have been hired. As a result, tens of millions of new students have enrolled in school (as detailed in Section 2).

In comparison, governments and donors have given relatively *little* attention to the third factor discussed above: improving student learning in schools. By and large, governments have not improved learning outcomes for many children because reform efforts have been policy-driven without putting in place strong incentives for educators to focus their attention on the things that need to happen in the classroom to support student learning. In other words, policies have not influenced teaching practice. For example, governments frequently focus on training teachers and distributing textbooks, but they rarely examine carefully how teaching changes or how teachers use the books in the classroom. Our hypothesis is that in order to successfully improve quality in schools, we must first change the paradigm to look at *practice*, and to use practice to inform policy, rather than the other way around. In Section 6 we discuss in greater detail why many interventions have not successfully changed practice and how our strategy to **identify effective instructional models** will be structured to bring about larger scale changes in practice.

Stimulating the changes necessary to improve the fourth and final factor mentioned in the previous section—funding and management practices—requires pressure from outside government and donor agencies, as these are the very institutions that must change. Civil society groups play an important role in providing this pressure. The Global Campaign for Education, for instance, has been successful in securing increases in donor funding from developed countries, and some evidence suggests that national EFA coalitions have influenced government budgets for primary education. We believe that additional key investments are necessary in this area, especially at the national level, to ensure that proven instructional models are sustained and adopted as policy by the government system. In Section 5, we discuss how QEDC is pursuing this goal by **increasing attention to and accountability for learning**. In Section 7, we cover our second strategy in this area, which is to **ensure sufficient resources, used effectively**.

Having broadly identified our reasons for pursuing work on these three strategies, we now turn to discuss in more detail what it is that has prevented change from happening in each of these areas.

5. INCREASING ATTENTION TO AND ACCOUNTABILITY FOR LEARNING

5.1. Information Gaps

Civil society and other actors must build momentum to orient teachers', governments', and donors' attention toward the dire need to improve learning outcomes. A recent World Bank

report concluded that for “educational investments to translate into student learning, all people involved in the education process have to face the right incentives that make them act in ways that advance student performance.”^{xv} The fact that very little information is available about whether or not students are learning to read and write in the lower grades of primary school is a major bottleneck to creating system incentives for improving student performance.

In some countries, policymakers receive student results for their country by participating in international student assessments or by conducting their own national assessments of learning. In most developing countries, however, the public almost never receives this information about how well their children are learning. Furthermore, test results often cannot be compared across schools, districts, or countries and from one year to another, since technical issues are not dealt with carefully.^{xvi} Moreover, most often these assessments are administered to students in the later grades of schooling, not by the third grade when many children drop out. While parents know (and often pay close attention to) how well students and schools fare on primary school leaving exams, there is very little reliable, independent, data available to focus public attention and generate pressure for quality improvements in the first few grades, when it matters the most. Therefore, increasing public access to such information—and with it, pressure for educators and governments to *use* the information—is a crucial element of any strategy to improve educational quality.

5.2. Improved Knowledge about What Students are Learning

The QEDC initiative uses two tools to improve knowledge about student learning and help realign incentives for more accountability for learning: (1) funding **civil society assessments** of school-aged children’s reading and math skills at the regional, national, and/or community levels and (2) **strengthening the competence of government assessments**. Funded projects are expected to assess student learning, and the results will be shared and discussed with the public, education administrators, teachers, governments, and aid donors.

Pratham’s nationwide Annual Status of Education Report (ASER) in India provides a key example of an approach to civil society assessments of student results. ASER has focused the attention of parents and policymakers on the abysmal learning outcomes in India’s schools and provides a rough benchmark against which to measure progress. Similarly, other groups in India work with parents at a community level to monitor the performance of their children’s schools. The parents themselves then work to pressure the government for needed change. QEDC expects to support similar student assessments conducted by non-governmental organizations in Africa and has sponsored a group to study the ASER approach and adapt it to East Africa.

Although civil society assessment of student learning is important, so too are assessments conducted by the government. Governments themselves must track student learning. While most developing countries have national student assessment institutions, their quality and credibility vary considerably. Few capture student learning in lower primary school, and still fewer are able to provide timely information on student learning to districts and schools and the public at large.^{xvii} Since QEDC seeks to provide better, faster information to citizens, governments, and educators, the initiative works with others to build government capacity for student assessment systems, especially around the testing of early grade competencies.

6. IDENTIFYING EFFECTIVE INSTRUCTIONAL MODELS

6.1. Inadequate Policies and Practices

Information alone is not enough to drive improvements in student learning. Strong evidence indicates that what happens in the classroom—the teaching-learning process—is one of the most important determinants of student achievement. Yet, as mentioned in Section 4, too often government policies such as those around teacher training have failed to change classroom teaching practices. Many education policies geared to improve pedagogy have focused more on curriculum reforms than teacher practice. Those that have directly addressed pedagogy, such as introducing mother tongue instruction, have often ignored the practical constraints on implementing these policies. Moreover, essential classroom practices are often not addressed in teacher training. For instance, in most countries teachers are not specifically trained in methods to teach children to read.

Those programs that have attempted to change teaching practice have generally failed to have broader impact on policy for two main reasons: (1) they have not been designed and implemented in a way that encourages and ensures broad uptake; and/or (2) they have not included efforts to rigorously analyze or document their impact on student learning. In regard to the first reason, most projects that aim to improve student learning by focussing on changes in the classroom are implemented in only a few schools. Hence, although successful, the project remains too small to have any effect on the larger system. Moreover, many projects are often too costly for long-term government adoption. Other projects, especially those financed by international donors and managed by international staff, have limited impact because the support base within the country is weak and they are usually run parallel to the government system.^{xviii} The few projects that have focused both on student learning and on large-scale implementation in government schools have, by and large, lacked rigor in assessing student learning outcomes. For example, a 2006 report by the World Bank on its own education lending found that less than one in three projects ever aimed to improve learning outcomes, and that among those projects with a learning outcome objective, well under 50 percent had an evaluation with repeated measures of learning outcomes.^{xix}

6.2. Improving Classroom Practice and Ensuring Broad Uptake

QEDC's grantmaking seeks to **identify effective instructional models** by supporting promising instructional models in government schools and supporting external impact evaluations that assess the models' effectiveness. In order to ensure that improvements in practice are structured to catalyze broader uptake of proven models, QEDC supports projects with the following characteristics:

1. A well-defined model including teaching methods, teaching materials, a teacher incentive system, and/or a teacher development process to improve learning in the first three grades of primary school. The model must respond to existing school conditions (e.g. crowded classrooms, poorly motivated teachers with weak skills, teacher absenteeism, etc.) and make teachers' jobs easier and more rewarding;
2. Costs that do not exceed what the government itself could conceivably spend;

3. Implementation in enough government schools – and with government support – to demonstrate that system-wide change is possible;
4. Implementation in generalizable settings that could have a national and international demonstration effect.

Furthermore, QEDC prefers to support *in-country* NGOs to develop and implement instructional models. This is a critical element of our strategy as in-country NGOs are best placed (a) to develop instructional models that match the local context, (b) to develop ongoing relationships with governments, and (c) to stay with successful projects until the government accepts expanding and sustaining them over the long term. Each project is coupled with a simultaneous **external impact evaluation**, including baseline data and a control group, to determine the impact of the project on student learning. Global and in-country researchers conduct the evaluations, which can strengthen the education research capabilities within countries.

The factors outlined above—including a sound design with realistic costs, government engagement at the outset of the project, implementation in a large number of schools, and rigorous impact evaluations to determine what works—help to reinforce and ensure that successful projects can be replicated and institutionalized across the country, and potentially elsewhere in the developing world.

QEDC’s grant to the Indian NGO Pratham exemplifies how two grantmaking strategies—increasing attention to learning and identifying effective instructional models—work together. Pratham developed the Annual Status of Education Report (ASER) to show the government and the public that students were learning little. Pratham also developed a method to improve reading and math by training teachers to use a simple, replicable teaching approach and by engaging communities and teachers in producing low-cost, relevant learning materials. QEDC funded Pratham to use its method in ten states in India, directly reaching four million children. We have also supported MIT’s Poverty Action Lab affiliate in India to lead a rigorous impact evaluation of the project’s interventions. In short, Pratham’s work and our related grantmaking is an example of “demonstration advocacy.” ASER demonstrates to the public and government that there is a problem; Pratham has developed practical ways to solve the problem; and a strong Indian research institution is examining the effectiveness of the solution.

While the example above illustrates our strategy in action, significant challenges remain given the practical constraints to implementing instructional models where in-country organizations and support systems are not yet strong enough to carry out the work. To address these challenges, QEDC will invest modest resources in the following activities:

1. Supporting grantees to strengthen their organizations and expand their reach in order to implement large-scale projects.
2. Identifying small organizations and individuals with promising classroom interventions to test whether their interventions are viable and scalable. Such grantmaking could both ensure a pipeline of projects for later development and attract increased attention to the importance of learning outcomes within countries.
3. Strengthening in-country researchers, practitioners, and policy analysts to develop the requisite experience and skills to conduct policy analyses and assist in the dissemination

of project results. Such support will ensure critical, ongoing input to public policy and practice in education.

7. ENSURING SUFFICIENT RESOURCES ARE AVAILABLE AND USED EFFECTIVELY

7.1. Resources are Scarce and Imprudently Used

Although critical, even if a society and its government are aware that schools are failing even while proven instructional models exist, the amount of money for education and the way in which it is spent will ultimately determine how successfully changes can be made. Both government resources and international aid are insufficient and, more importantly for our purposes, inadequately oriented toward quality.

Equally troublesome is that there are few accountability mechanisms for how money flows through the system and gets spent. In many countries, allegations abound that a significant amount of the money allocated for education does not reach the schools. For example, a 1996 Public Expenditure Tracking Survey (PETS) in Uganda revealed that Ugandan schools were only receiving about 13% of the funds allocated to them by the central government.^{xx} Other sources substantiate that corruption diverts resources for education in many countries.^{xxi} All of these problems add up to big gaps in both the amount of money allocated and the way it is used, contributing to shortcomings in the quality of education delivered.

7.2. More Money, Better Spent

Schools in developing countries are embedded in an education system that stretches from villages to the corridors of developed-country government-aid offices. Therefore, QEDC works globally and within target countries to address the critical gaps in the amount of resources available for education and the ways in which those resources are spent. Globally, QEDC supports groups that are effectively advocating for **more development assistance** for quality education in poor countries. Over the past several years, advocacy groups have pushed for funding increases to get all children into school, and now they are beginning to look at and publicize whether learning is being achieved with the funds that are being disbursed. They recognize that more attention to quality will help improve the efficiency with which money is used by increasing retention and reducing drop-out rates. QEDC is supporting some of the advocacy community's initiatives as they make this strategic shift.

QEDC also supports the development of **innovative funding mechanisms** to better align aid disbursement with education outcomes. For example, we support the development of an international pilot to test an incentive structure called "Cash on Delivery," in which donors pay recipient countries directly for improved educational outcomes without placing conditions on how the outcomes will be achieved, thereby creating space for innovation. QEDC will sponsor an evaluation of how this mechanism impacts educational outcomes and how current processes within government may change as a result of this "no-strings" approach. QEDC will also

continue investing time in other international forums to influence donor behavior towards investments that translate more effectively into quality improvements.

At the country level, QEDC is funding efforts to **increase government allocations to education** and to **improve oversight of expenditures in education**. To do this, QEDC funds civil society monitoring of the use of funds allocated for education. For example, Transparency International is currently piloting a methodology to assess the use of government funds in schools in seven African countries. The goal of this and future grants is to identify needed reforms that will reduce inefficiencies in education spending at the country level.

8. COUNTRY FOCUS

Education is by and large a national endeavor; therefore, long-term changes in education will only occur if the necessary systems and processes are in place at the country level. In order to maximize the impact of the strategies described above, all three areas of investment must be pursued concurrently *within a country*. QEDC has selected target countries in which to focus the majority of its investments. In concert with the Foundation's Global Development Program strategy, QEDC has identified India and East and West Africa as the geographic regions in which to concentrate investments based on three criteria:

1. **Need**, including low or middle income status, number of people living on less than \$2/day, and limited voice of the poor.
2. **Political feasibility**, including, for example, Millennium Challenge Account (MCA) eligibility, political stability, and government effectiveness.
3. **Favorable implementation conditions**, including the existence of possible partner organizations as captured by NGO presence, political will to improve, and other relevant policies, such as some commitment to assess education outcomes

To be sure, the criteria listed above mean that QEDC will not be working in certain countries that have dire educational needs. For example, Somalia and the Democratic Republic of the Congo are not on our list of countries. However, the strategy as described above is focused on building long term systemic change in educational quality. We are not likely to make progress towards these ends in conflict zones or other countries without reasonably favorable implementation conditions. We also hope that successful grantmaking in a few focus countries will have demonstration effects in other countries.

Using this overall country selection as a starting point, QEDC awards most of its resources in a few target countries where in-country organizations are working on QEDC's three areas of investment (accountability for learning, innovative instructional models, and adequate funding that is effectively managed). Our working hypothesis is that systemic reform and sustained improvements in the quality of primary education will come through the combined effort of grantees working within a country. Therefore, the initiative will make grants in target countries for projects across the three areas, encouraging grantees to work together and with the government. These countries are likely to include: Kenya, Tanzania, and Uganda in East Africa, Mali, Ghana, and Senegal in West Africa, and India.

Beyond this, QEDC will make limited, high-leverage investments regionally to strengthen networks and knowledge-sharing among educators, especially in Africa, to ensure that the skills and knowledge to sustain improvements in student learning rest within our regions of interest over the long term.^{xxii} Similarly, as mentioned above, QEDC continues to make grants to increase pressure for more funding for education directed to learning outcomes because donors play an influential role in our target countries and within the region.

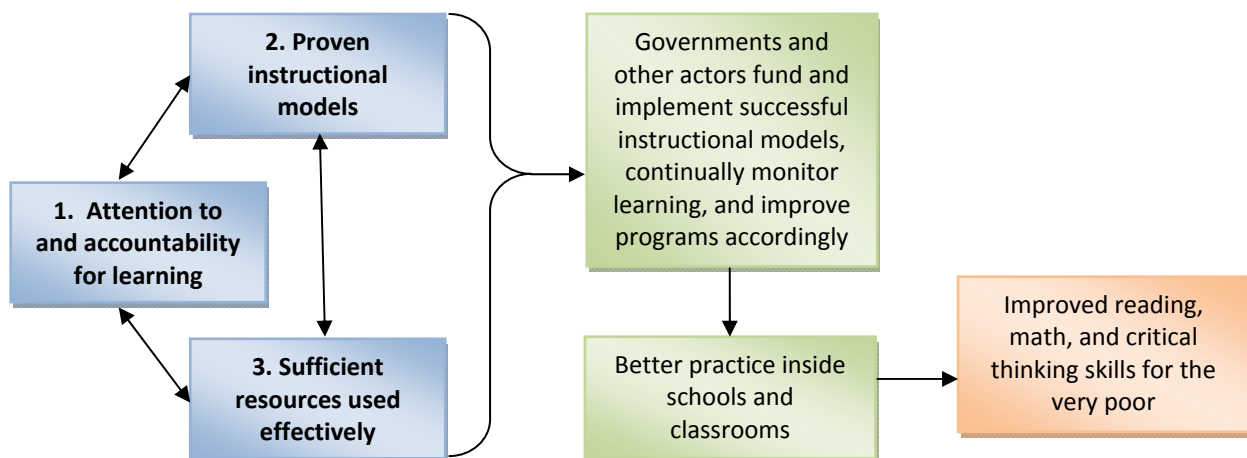
Our global investments and collaborations with international organizations are designed to support change within countries and to provide a platform so that when systemic change occurs in a few countries, other countries can learn and replicate the experience. Successful grantmaking at the national, regional, and international levels will strengthen the provision of quality education in our target countries over the long-term by ensuring sufficient and efficient international assistance. This is achieved, in part, by connecting practitioners and researchers across countries, by providing information about proven alternative pedagogies, and by demonstrating that improvements in learning can be accomplished when educators, non-governmental organizations, and governments collaborate to improve learning.

9. THEORY OF CHANGE

As we have discussed, efforts to improve quality through education policy reforms have not improved learning outcomes in developing countries. QEDC posits a theory of change in which three key levers are necessary to drive improved learning within a country’s school system: pressure, knowledge, and resources. At the crux, our theory (represented in Figure 2, below) is that if more attention to and accountability for student learning exist in a country (1), if governments and educators have knowledge about effective instructional models that can be scaled (2), and if the necessary resources are in place to ensure student learning (3), policy *and* practice within the system (from donor practice to teacher behavior) will change to produce improved student learning. Though these three conditions alone are not sufficient, we believe that they are all necessary. By investing in all three mutually-reinforcing areas within a country, the QEDC initiative expects to maximize its impact on student learning.

Figure 2

QEDC Strategies and Theory of Change



These grantmaking strategies, summarized in the table in Appendix A, add up to more than the sum of the parts by working together within a country to catalyze changes in the practice of governments and other actors that are based on better practice in schools and classrooms. Ultimately, new policies and programs will improve learning outcomes for all students. QEDC grantees garner **attention to and accountability for student learning** by working to improve public knowledge about learning outcomes. Still, information alone about the inadequate state of student learning will not provide answers for how to improve student learning. Therefore, we support the development of **effective instructional models** that demonstrate ways to successfully improve classroom practice and student learning at a large scale within the bounds of cost and other system constraints. This support must also ensure that there are incentives in place and funds available for the government to take up successful projects and sustain them. Therefore, we invest in activities that press for **sufficient resources used effectively** by governments and development agencies in education.

Promoting systemic change in education, however, is a complex and context-specific task. As such, QEDC analyzes the forces which may drive system-wide change in target countries. This analysis helps to identify the decision-makers that must be influenced, the tactics that may effectively influence them, and those organizations that can effectively pursue those tactics. Just as the particulars of the strategies will vary from one country to the next, by no means are these strategies all-encompassing. Rather, these three strategies are designed to address those crucial bottlenecks to improving quality that a foundation may be able to influence. Other organizations are working on issues that will complement the QEDC grantmaking strategy (e.g., quality assurance by Ministries of Education, reform of teacher training curricula, etc.). Moreover, as QEDC investments accumulate, we will be better able to gauge whether this theory of change addresses the pitfalls of previous efforts sufficiently to improve educational quality, and whether QEDC will achieve the intended learning levels among the very poor.

10. WHAT SUCCESS WILL LOOK LIKE

If the strategy is successful, we expect that in the next few years QEDC grantmaking will be seeding systemic change in primary school instruction in a number of countries. QEDC's strategy will have leveraged funding and influenced policies of governments, NGOs, and development agencies to drive system change over the longer term. Also, our model for education reform will have started to spread to other countries and among other donors.

Within our target countries, teachers in project schools will be equipped with proven methods to teach reading and math, and will be better supported and encouraged to use these methods in the classroom. Students attending these project schools will be able to read and calculate by the time they finish third grade and they will have been engaged in thinking critically. As a result, fewer of them will drop out of school. More broadly, citizens and government will know whether or not children in their country can read and do basic math and will be able to track progress over time. Governments, in turn, will begin to take a more serious role in ensuring that students in schools are actually learning. The increased pressure that international donors will exert on governments to focus on student learning outcomes will further prod them to take a keen interest in project results and plan for the scale-up of projects which are proving successful. At the same

time, budget monitoring efforts will help to ensure that allocated funds are actually used for their intended purposes.

Ultimately, if educational systems can make improvements in the quality of education, particularly in the lower grades of primary school, such improvements will help to guarantee a literate, healthy, economically productive population for generations to come. Our hope is that the QEDC grantmaking strategy presented here will support some countries to move towards a universally educated population that can fully participate in society and contribute to its growth.

Appendix A. Quality Education in Developing Countries Grantmaking Snapshot

Goal: Improve learning outcomes for the very poor, with a specific focus on basic reading, math, and critical thinking skills in the first three grades of school.

Geographic Focus: Pursue all the strategies below within select target countries in East Africa, West Africa and at the state level in India.¹

Problems	Strategies	Grantmaking Activities	Types of Grantees
Not enough models of classroom practices that improve student learning <u>and</u> can be implemented widely by government, particularly around early grade acquisition of reading and math	Identify effective instructional models	Support promising models to improve the teaching-learning process . Projects have low-cost pedagogy, materials, teacher incentive systems and/or teacher development processes that respond to existing conditions in the first three grades of primary school.	National education NGOs in target countries in East Africa, West Africa, and India that can operate at a relatively large scale and engage with government
		Fund impact evaluations of projects with the above characteristics to determine their impact on early grade reading, math, and critical thinking	Global and in-country research institutions that can perform rigorous impact evaluations
Little information about whether or not students are learning to read, write, and calculate in the early grades and few accountability mechanisms for ensuring that students learn	Promote more attention to and accountability for learning outcomes	Fund civil society assessments of children's reading and math skills	Education advocacy organizations and think tanks in target countries
		Strengthen the competence and independence of national student assessments, especially of lower primary learning	Organizations with technical assessment expertise
Overall amount of money available for education is insufficient to provide universal quality education and many funds which are available are misallocated or siphoned off before they reach their intended purpose	Ensure sufficient resources used effectively	Advocate for more government money to basic education	Advocacy and budget watchdog groups in target countries.
		Fund civil society monitoring of the use of funds in education	
		Advocate for more donor money to basic education	Global advocacy groups targeting major international donors for more and better development assistance to education
		Support mechanisms to ensure donor funding is spent effectively for student learning	

¹ The gray boxes involve grantmaking at the international level, which will ultimately also have an impact within target countries.

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- ⁱ More specifically, fertility rates decrease from a high of seven to eight children for a woman over her lifetime if she has little or no education to between one to three children if she has eight or more years of education. Cohen and Soto 2007; Lloyd 2000; Watkins 2000
- ⁱⁱ Hannum and Buchmann 2003, Jejeebhoy 1996, Schultz 2002
- ⁱⁱⁱ A one standard-deviation increase corresponds to a 3.5 point (out of 14 possible) increase in cognitive achievement score.
- ^{iv} Moll 1996; Hanushek and Woessman 2007. These results are stronger for the very low levels of learning in developing countries. In rich countries, this relationship between test scores and wages is not conclusive.
- ^v UNESCO 2007
- ^{vi} UNESCO 2007
- ^{vii} Nkamba and Kanyika 1998
- ^{viii} EFA Status and Trends 2000
- ^{ix} Ellis 2003
- ^x Glewwe 1999
- ^{xi} Pratham, ASER 2006
- ^{xii} World Bank 2007
- ^{xiii} Abadzi 2006
- ^{xiv} Abadzi 2006
- ^{xv} Hanushek 2007
- ^{xvi} Lockheed 2008
- ^{xvii} UNESCO's 2007 EFA Global Monitoring Report presents information on which developing countries have national student assessment institutions, and it summarizes briefly the assessments that they have done.
- ^{xviii} DeStefano, Schu Moore, Balwanz, and Hartwell 2007
- ^{xix} World Bank 2006
- ^{xx} Kaufman 2005
- ^{xxi} For example, see Dakar Framework for Action (2000)
- ^{xxii} In some select cases, we may take advantage of instructional innovations across more than just our target countries when there are particularly strong opportunities to support proven instructional models which may help to create significant regional pressure for change.

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