Basic education services

c h a p t e r 7

An institutional arrangement for basic education should be judged by its production of high-quality learning, equitably distributed. This requires that children be in school and that they learn. This in turn rests on education systems that create relationships of accountability between citizens, politicians, policymakers, and providers, with clear objectives, adequate resources, capable and motivated providers, progress assessments, and performance-oriented managements.

Successful education systems vary widely. Some systems are centralized, others decentralized. Some have almost exclusively public schools, while others provide public support to private providers. But not just anything goes.

- The politics of schooling—particularly the effectiveness of the voice of poor people—determines both the school system's objectives and the public resources that go to education.
- The compact between policymakers and providers of schooling needs to balance the autonomy of schools and teachers with performance assessment.
- Schools (and school systems) must be enabled to manage for performance—and, particularly, to find effective ways to train and motivate teachers.
- Direct parent and community participation in schools, demand-side inducements to expand enrollments, and choice—if correctly designed—can be valuable parts of an overall plan for school improvement.

Common problems of service provision

Education systems face the common problems of service provision outlined in chapter 1—unaffordable access, dysfunctional schools, low technical quality, low client responsiveness, and stagnant productivity. But not all countries face the same problems. In many of the poorest countries there are enormous deficits in affordable access. Poor people have less access, lower attainment, and lower quality than those better off. In many countries public sector provision is close to dysfunctional and rife with corruption. The technical quality of instruction and learning outcomes are shockingly low, especially among poor people. And even the most advanced economies struggle to make education systems more productive.
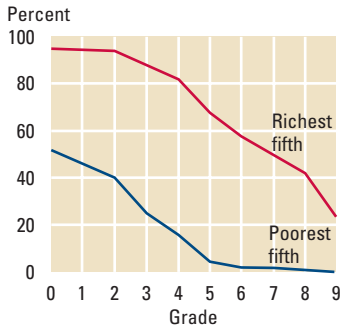
Shortfalls in universal primary completion—a combined result of children who never enroll, children who do not progress, and children who drop out—reflect the failures in the system. In Madagascar only 52 percent of 15- to 19-year-olds in the poorest 20 percent of the population had ever enrolled in school, and only 4 percent completed even grade 5 (figure 7.1). In Brazil 89 percent of poor adolescents enrolled in grade 1, but only 30 percent completed grade 5 because of high dropout and repetition rates. In Turkey high retention through primary school, followed by a sharp drop in progress to the next level, suggests that systemic and institutional solutions are required to increase achievement. In Bangladesh only 60 percent of poor adolescents have completed grade 1, and only 36 percent have completed grade 5.
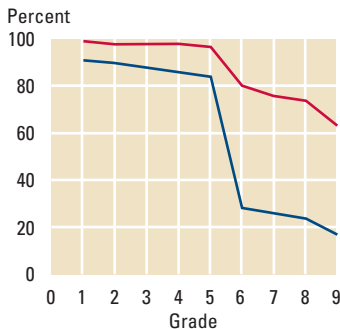
Unaffordable access

Despite at least 55 years of acknowledgment that universal literacy is the heart of development, and despite repeated rhetorical commitments to universal enrollment, even the

Figure 7.1   Poor children: less likely to start school, more likely to drop out
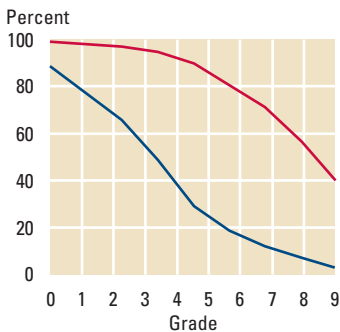15- to 19-year-olds who have completed each grade
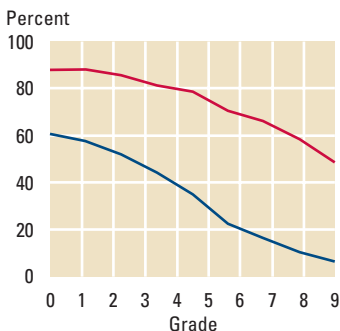
Madagascar 1997

Percent

Richest fifth

Poorest fifth

Grade

Turkey 1996–97

Percent

Grade

Brazil 1996

Percent

Grade

Bangladesh 1996–97

Percent

Grade

Source: Analysis of Demographic and Health Survey data.

modest goal of universal primary school completion has not been realized. Some countries have made huge strides—average completion rates in Brazil expanded from less than 50 percent in 1990 to more than 70 percent in 2000. But if countries continue at only their recent rate of progress, universal primary completion would come only after 2020 in the Middle East and North Africa, after 2030 in South Asia, and not in the foreseeable future in Sub-Saharan Africa.

In the very poorest countries the attainment deficit is spread across the population, but in most it is concentrated among children from poor households. In countries with very low attainment, like Mali, most of the population is rural, and there are substantial deficits in primary completion even among relatively wealthier and urban families. In India the rural poor (poorest 50 percent) accounted for 72 percent of the deficit in completion of grade 5 among 15- to 19-year-olds, and completion is higher among boys than girls. In the Philippines the deficit is much lower, concentrated among the rural poor and higher among boys than girls.

Dysfunctional schools

Schooling completions and learning outcomes may fall short because providers are dysfunctional. While most teachers try conscientiously to do their jobs, one recent survey found a third of all teachers in Uttar Pradesh, India, absent. Cases of malfeasance by teachers are distressingly present in many settings: teachers show up drunk, are physically abusive, or simply do nothing. This is not "low-quality" teaching—this is not teaching at all.[314]

Low technical quality

The quality of instruction can also be low because of low capability, weak motivation, and a lack of complementary inputs. In very-low-income settings learning outcomes can be dismal. The 1994 Tanzania Primary School Leavers Examination suggested that the vast majority of students had learned almost *nothing* that was tested in their seven years of schooling—more than four-fifths scored less than 13 percent correct in language or mathematics.[315] In

Bangladesh 30 percent of students who completed grade 5 were not minimally competent in reading; 70 percent were not minimally competent in writing.[316]

Evidence on learning outcomes is disappointing even in middle-income countries. For instance, in the recent Programme for International Student Assessment of the achievement of 15-year-olds in school, only 5 percent of Brazilian students reached the Organisation for Economic Co-operation and Development (OECD) median in mathematical literacy (figure 7.2). Fifty-six percent of Brazilian students were at level 1 (of 5) in reading literacy, compared with 18 percent for students in OECD countries. Only 4 percent reached proficiency levels of 4 or 5, compared with 31 percent for OECD students.[317] This is not to single out Brazil for poor performance: Brazil is widely recognized for its advances, and its willingness to participate in the study and its courage in releasing the results demonstrate a strong commitment to education outcomes (other countries have participated in examinations and then refused to disclose the results). In addition, in an earlier comparison of 11 Latin American countries Brazil was tied with Argentina for second place in the mathematics performance of 4th graders.

Low client responsiveness

When communities are not involved in establishing, supporting, or overseeing a school, the school is often seen as something alien. Villagers refer to "the government's" school, not "our" school. In *Voices of the Poor* people often complain of absent or abusive teachers and demands for illegal fees to get their children into school or to influence examination results.[318] A study of schooling in rural Nigeria found that villagers often stopped expecting anything from government schools, shouldering the burden themselves.[319]

Stagnant productivity

Creating and maintaining an institutional environment that promotes higher productivity and more learning is not easy. A recent set of studies documented that spending per pupil in real terms has increased by 50 percent or more, often two-

or threefold, in nearly all OECD and East Asian countries. Yet in none of these countries have test scores improved commensurately.[320] The obvious implication of these two facts is that measured learning achievement per dollar spent has fallen dramatically in every country examined.

For higher-quality systems, strengthen the relationships of accountability

Despite enormous differences in attainment, equity, and learning across countries, the features of school systems are strikingly similar. Public production is almost always the dominant—if not exclusive—means of government support of education. Whether in Argentina, Egypt, India, Indonesia, Paraguay, or Tanzania, public systems display age-grade organization of classrooms, replication of social structures and inequalities, and similar ways of training, hiring, compensating, and promoting teachers. Despite these surface similarities, there are widely different outcomes. Both Nigeria and Singapore retain many of the organizational elements of British education. Yet on one international achievement test in the 1980s Nigeria was among the worst performers while Singapore is frequently among the best.

That public provision has often failed to create universally available and effective schooling does not imply that the solution is a radically different approach (complete decentralization, total control by parent groups, generalized choice) or a narrow focus on proximate determinants (more textbooks, more teacher training). Universal and quality education can come from very centralized systems (France, Japan) or from very decentralized systems with considerable local accountability and flexibility (United States). Many countries have little private schooling, and some a great deal (Holland). Classroom practice is what matters. If the underlying causes of failure are not addressed, all these approaches can fail.

Chapters 3 through 6 developed a framework for analyzing service provision, looking at four relationships of accountability. In education, these are:

Figure 7.2   Fifteen-year-olds in Brazil and Mexico perform substantially worse on standardized tests than students in OECD countries
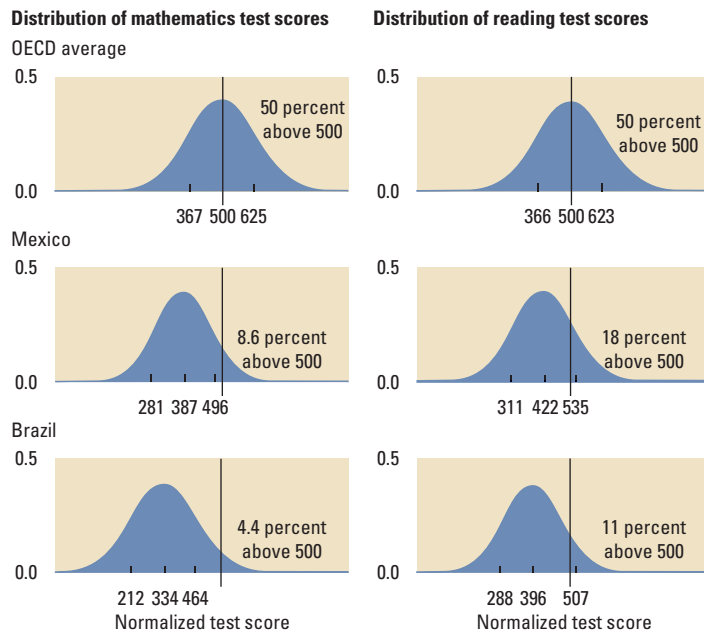
Note: Distributions are approximated on the basis of the mean and standard deviation reported in the original source.
Source: OECD (2001).

- *Voice,* or how well citizens can hold the state—politicians and policymakers—accountable for performance in discharging its responsibility for education.
- *Compacts,* or how well and how clearly the responsibilities and objectives of public engagement are communicated to the public and to private organizations that provide services (Ministries of Education, school districts).
- *Management,* or the actions that create effective frontline providers (teachers, administrators) within organizations.
- *Client power,* or how well citizens, as clients, can increase the accountability of schools and school systems.

Effective solutions are likely to be mixtures of voice, choice, direct participation, and organizational command and control, with functional responsibilities distributed among central, regional, local, and school administrations. The pieces have to fit together as a *system.* More scope for parental choice without greater information about schooling outputs will not necessarily lead to better results. Information systems that produce data on inputs

but do not change the capabilities or incentives of frontline providers cannot improve quality. Schools and teachers cannot be made more accountable for results without also receiving sufficient autonomy and resources and the opportunities to build capabilities. Conversely, schools cannot be given autonomy unless they are given clear objectives and regular assessments of progress.

What successful education systems share is a working structure of accountability: clear objectives, adequate resources, and capable and motivated providers. This Report focuses on institutional reforms to achieve that system of accountability—not on the proximate determinants of success, such as curriculum design, pedagogical methods, textbooks, teacher training, school construction, or new information technologies. Institutional reforms will achieve desired outcomes by affecting proximate determinants—and proximate determinants that produce good education are the outcome of well-structured and well-functioning systems. But efforts to improve proximate determinants through internal management initiatives have usually failed. Why? Not because of a lack of knowledge of what to do. But because of lack of the sustained bureaucratic, market, parental, and political pressure needed to make things work.

The disappointing experience with teacher training shows the limit of a focus on proxi-

mate determinants (box 7.1). When teachers are not consulted in training design—often the case—poor implementation is the result. Training may not be integrated into the system, as when teachers are trained in methods inconsistent with public examinations and so are reluctant to adopt them. Teachers often have little incentive besides professional pride to adopt new methods.

If the underlying problems are not solved neither bureaucracy nor market will work well. Increasing client power, by creating mechanisms for communities and parents to improve their local school, is important. But this short-route accountability is not enough. Improving services also requires stronger mechanisms of long-route accountability—accountability of politicians and policymakers for education and improved proficiency in public administration with accountability of the education bureaucracy for outcomes. There is no quick fix in an area as complex and extensive as schooling, only the hard slog of gradual improvement through *strategic incrementalism,* which links current operational actions with long-run institutional strategies and goals.

Citizens and clients, politicians and policymakers: voice

In administration of all schools, it must be kept in mind, what is to be done is not for the sake of the pupils, but for the sake of the country.

—Mori Anori, Japanese Minister of Education 1886–89

Politics plays a key role in establishing objectives for the education system—concerning both distribution and quality—and in mobilizing resources. The reason is that schooling, especially at the basic level, has become an important element in a child's socialization.

Those who control the state use schooling to promote beliefs they consider desirable. Nearly everywhere this means that schools promote a sense of national identity, a national language, and loyalty to the nation-state—in competition with more local or ethnic affiliations—and, in more extreme cases, a specific political indoctrination. Modern states—from Third Republic France

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B O X   7 . 1 *The dismal state of teacher training in Pakistan circa 1990*

"Teacher training in this province is a mockery. We should close down the teacher training institutes and stop this nonsense. I have been teaching in a B.A./B.Ed. program for many years and see no signs that I have any impact on the students I teach."

—A university education instructor quoted in Warwick and Reimers (1995).

"Most inmates of this system [two teacher training institutes] have no respect for themselves, hence they have no respect for others. The teachers think the students are cheats, the students think the teachers have shattered their ideals. Most of them are disillusioned. They have no hopes, no aims, no ambitions. They are living from day to day, watching impersonally as the system crumbles around them."

—Nauman (1990).

A national survey of Pakistan's primary schools suggests that these anecdotal accounts are only too true. Survey data on teaching practices "provide no basis for statements that …teacher training makes a substantial difference to how teachers teach." A 1998 study of teacher training suggests that "staff and faculty are professionally untrained, political interference is common, resources and facilities are poor and badly utilized, motivation and expectations are low and there is no system of accreditation to enforce standards." Embedded in an education system that was fundamentally unaccountable and lacked any outcome orientation, teacher training reflected worst practice.

Sources: Warwick and Reimers (1995); Kizilbash (1998), p. 45.

to Ataturk's Turkey—have also used public schools to supplant or suppress religious instruction.[321] Authoritarian states have used schooling to disseminate a single acceptable ideology—for example, Soeharto's promotion of the five principles of *pancasila*[322] in Indonesia. These examples are not the exception but the rule: countries around the world explicitly use schooling to inculcate ideas about the proper organization of society.

Voice and the objectives of schooling

Schooling has become a battleground for political conflicts. Different groups want different—often contradictory—things from schooling. Poor parents see education as an opportunity for their children to lead better lives, but they may also want education to reinforce traditional values. Elites may want universal education but often promote public spending on higher education for the benefit of their own children. Urban and business coalitions may favor more education because it increases the productivity of their workers, or industrialists may quietly oppose "too much" education because it makes workers restive. One recent study of owners and managers of modern factories in Northeast Brazil that were moving to cutting-edge business practices revealed a disturbing lack of support for expanding education. Many felt that a primary education (eight years) was helpful, but more than that was "dangerous" because it created workers who were less docile. Many commented that "too much education is a bad thing." (Tendler 2003). Politicians may want to deliver on promises of universal schooling while also using the education system to provide patronage jobs (the example of Pakistan, in box 5.3, is not unique). Teachers and their unions want high-quality universal education but also higher wages.

To get what you want, you need to know what you want. But what a society wants from its schools is not simple and cannot be decided by experts alone. A recent study of attempts to improve the quantity and quality of basic education in an Asian country in the 1990s concluded that even many pedagogically and internally sound reforms did not have a sustained impact on teaching practice or student learning. Why?

Because the educational system had no coherent, consensual focus: "For reforms to stick, there first needs to be a vision for the future with agreed long-term objectives derived from stakeholders: informed dialogue with parents, employers, religious leaders, school leavers, and others. The absence of such a shared long-term quality-of-services strategy that focused scarce resources on quality rather than quantity has left the education sector open to the imposition of ideas from outside: from donors, with agendas of questionable value to the country's situation, or from graduates returning with overseas degrees and ill-informed, though well-intentioned, agendas of their own."[323]

Democracy is not necessary for excellent schools. The huge variation in commitment to schooling across the states of India is enough to suggest that electoral democracy is also not sufficient for voice to lead to universal education (see spotlight on Kerala and Uttar Pradesh). But the absence of democracy or other means of effective citizen voice has a huge downside. While one-party states occasionally produce good results (see spotlight on Costa Rica and Cuba), many authoritarian regimes have no interest in expanding education or improving its quality. There are two risks: the system is effective but its goals are completely set by politicians and policymakers, or the system is ineffective because politicians and policymakers have goals other than effective provision of services. The results: too few resources are allocated to education, too few of those resources reach poor people, and resources are allocated ineffectively (because providers are more influential than citizens).

As more countries move to more democratic modes of choosing leaders, citizen control over the structure and content of curricula gains prominence. Having a common negotiated vision of the objectives of public support for schooling makes it easier to move to the other stages of improving the quality of schooling—mobilizing and allocating resources, communicating objectives to providers, and delegating responsibility and autonomy to schools. Without a clear vision of goals, reform is reduced to a focus on inputs and process alone.

The greater the demand for education, the sharper the vision. In Malawi, Uganda, and

most recently Kenya, a commitment to universal education was a popular stance—although a difficult commitment to match with resources (see spotlight on Uganda).

Adequate resources, adequately distributed

To achieve educational goals politicians and policymakers—either autonomously or through the pressure of citizen voice—must provide adequate resources. To learn effectively, children need affordable access to infrastructure, inputs, and instruction—far from the case in many countries. A recent study of financing the global Education for All initiative compared successful and less successful countries along three dimensions:

- Revenue mobilization for primary education (overall taxation rates, the fraction of spending on schooling, the fraction of that spent on primary schooling).
- Unit cost of a year of effective schooling (teacher salaries and class size).
- Internal efficiency (years of schooling provided per primary school completer).

Even with adequate fiscal effort, reasonable costs, and internal efficiency, many countries do not generate enough resources to achieve universal completion. For these countries there is a compelling case for additional international assistance (see box 2.3).

But in many cases the resources are simply not used effectively. They are allocated to the wrong mix of inputs. Too great a share goes to higher levels of education. Or systems are inefficient in translating resources into outputs. A common problem is that teacher salaries, even at very low wages, crowd out all other inputs. A recent study found that 44 of 55 countries examined allocated more than 70 percent and half (23) allocated more than 80 percent of spending to salaries. Such levels of spending often imply either inadequate supplies to other inputs or formal or informal levies on parents. Empirical studies also show that increases in teacher salaries have little or no association with learning outcomes (discussed further below). Many studies estimate the impact of selected classroom instructional materials or school facilities to be some 10 times that of teacher salaries (this is not to say that simple "equipment-based" approaches will succeed). Another common problem is devoting resources to reduce average class sizes, which often results in inefficiently small classes—boosting unit costs and limiting access.

Public resources are politically distributed, so the effective distribution of resources *is* an issue of voice. A review of the empirical evidence suggests that the common pattern of too few resources to high-productivity inputs is so ubiquitous—figure 7.3 gives just two of many possible examples—that it is likely generated by a political economy that fails to adequately incorporate the voice of poor people. Changing this distribution of resources requires more than a technocratic adjustment—as Brazil has shown by its reforms in the 1990s.

Because poor people are almost always the last enrolled, additional spending that expands access is more favorable to poorer households than existing spending. A study in India found that even though educational expenditures on average were not more pro-poor than a uniform transfer would be, the poor benefited more than proportionately at the margin when enrollments in primary education expanded (since the better-off were already in school).[324] So education expenditures that expand access are better targeted to poor people than resources that exclusively raise quality.

But the quality-quantity tradeoff is not a simple choice between creating additional school places or improving instruction. A major problem for poor children in nearly

Figure 7.3   Increases in test scores per dollar spent on different inputs
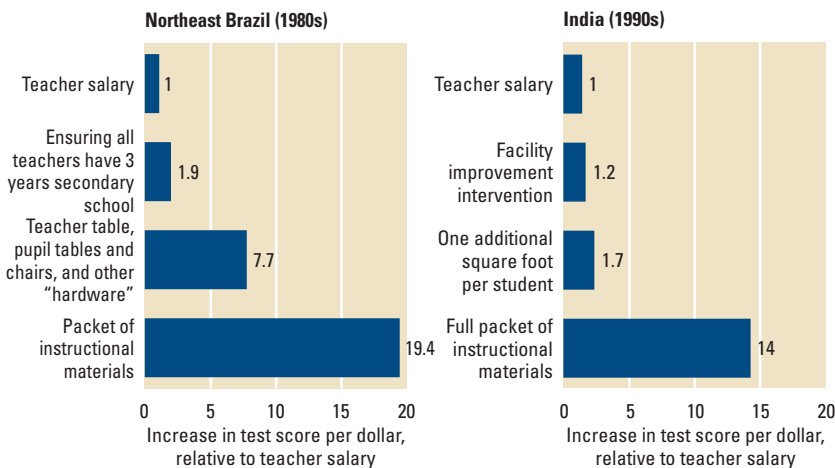
Source: Pritchett and Filmer (1999).

Table 7.1 In Madagascar, at higher levels of education unit costs are much higher and participation of the poor much lower

	Ratio of cost of a year of higher education to the cost of a year of primary school	Cumulative public spending on graduates of each level (percent of GDP)	Share of poorest 40 percent in those who complete each level (percent)	Share of poorest 40 percent in those who reach each level (percent)
No schooling	0	0	37.6	57.8
Primary (grades 1–5)	1	0.4	7.3	33.7
Lower secondary (grades 6–9)	2.75	1.25	0.5	3.1
Upper secondary (3 years)	5.5	2.56	*	*
Higher (4 years)	19.6	8.84	*	*

* indistinguishable from zero.
Sources: World Bank (2001c) and analysis of Madagascar Demographic and Health Survey.

every environment is that they drop out of school with greater frequency, in part because the quality of the schooling they receive is so low. So quality improvements need to accompany quantity improvements.

Spending on primary schooling is mildly progressive, but that on higher levels of education is not. With children from the poorest households unlikely to reach higher levels of schooling, and with greater per student spending at higher levels than at lower, children from richer households capture the bulk of educational spending. In Madagascar a single year of higher education costs 20 times that of primary schooling—and only 3 percent of children completing lower secondary school are from the poorest 40 percent of households (table 7.1). Relative cost alone is not the issue. It is whether funding across levels is equitable and efficient—or driven exclusively by elite politics.

The political conditions required for adequate budget allocations for education are not obvious. Simple answers like "democracy" are attractive—but just not true. India, democratic since independence, has wealth gaps in education attainment larger than any other country with comparable data. At least one empirical study suggests that nondemocratic countries spend more on education.[325] But there is a risk that these governments care not about the quality of education but about using schools for religious, secular, or national indoctrination. In countries with democratic elections, schooling opportunities can be limited and education resources devoted to patronage and clientelism if voice is weak and control rests with a narrow elite. Targeting resources to the desti-tute and disadvantaged has political dangers as well. Systems that focus mainly on poor citizens, leaving the middle classes no stake, tend to be financially less sustainable and to experience less pressure for accountability—and so tend to be inefficient and unconcerned with quality.

Policymakers and organizational providers: compacts

I do not care that teachers are offended by it. I am less interested in the teacher's method of teaching than in the result she achieves. . . . There should be a test at the end to see whether the results are being achieved. . . . Let us who represent the community say here and now there should be a [test] no matter who may oppose it. . . . If we want to see that a certain standard is reached and we are paying the money we have the right to see that something is secured for that money.

Eamon de Valera, Irish Prime Minister, 1941[326]

The line separating the state as education policymaker (setting the rules of the game) and as major organizational provider (running the school system) is typically blurred. The minister of education frequently wears both hats. Often there is no interest in measuring results, so there is no way of making the public provider accountable for results.

Clarifying objectives and the roles of policymakers and providers is a first step. Without specifying desired outputs and outcomes there is no way to say whether resources are sufficient (sufficient to do what?) or used effectively (relative to what goal?). Vague oversight and vague goals reduce management to compliance with formal rules for inputs and processes. The resulting lack of clarity often results in "mission drift" and

distracting struggles within the ministry of education. Lacking a clear mission, the education ministry is often accused of being captured by a teachers' union rather than representing the collective interest in schooling.

The Irish Prime Minister's insistence on testing is a common reaction to the perceived failure of schools: a temptation to define the output of the school system exclusively as test scores and then to hold schools accountable for those scores. But accountability too narrowly measured distorts the education system. Only what gets measured gets done. The strict primary completion examination brought in so confidently by the Irish government in the 1940s was gone by the 1960s, in large part because of these concerns.

The compact between policymakers and organizational providers should create an environment in which all schools have the means and motivation to provide high-quality learning. Whether there is public production or government funding of a range of providers, the compact should focus on outputs and outcomes. This requires a means of assessing a school's contribution to the collective objectives of education, and creating an environment for organizations to innovate and bring those innovations to scale—school autonomy with accountability.

The use and abuse of accountability

Creating accountability in schooling is difficult. Schooling is discretionary and transaction-intensive. It has multiple outputs that differ in measurability and in the difficulty of attribution. And it involves a complex—and not well understood—relationship between inputs and outputs. High-performance schooling conveys skills, attitudes, and values. Some steps in this process can be reduced to a detailed script. And some aspects of instruction can be replaced by technology. But face-to-face interaction and flexibility are crucial to high-quality instruction. Instructors need to be capable of exercising discretion—in assessing student mastery, providing feedback, and tailoring the instructional mode to the student and subject matter. This classroom behavior is extremely difficult to monitor.

Schooling has multiple outputs—some easily assessed, others not. Assessing mastery of simple skills through standardized testing is fairly straightforward. But it is difficult to assess how well schooling has conveyed a conceptual mastery that allows application to real-world problems. It is still more difficult to assess how well schooling has encouraged creativity. And it is even more difficult to assess how well schooling has conveyed values. Assessing success is further complicated because different actors assign different values to different objectives.

Designing an accountability system is difficult because it is difficult to attribute specific outcomes—or even outputs—to specific actors. If a 15-year-old has mastered

Table 7.2   Schools account for only a small part of variance in student learning outcomes (percent)

| | Share of total variance across students | | | |
	I Due to differences in student performance within schools	II Due to differences across schools	III Fraction of total variation attributable to student background differences across schools	IV Share of total variation in student test performance that is (a) school specific and (b) not attributable to student background differences across schools (II minus III)
Brazil	55	45	25	20
Russian Federation	63	37	17	20
Czech Republic	48	52	4	18
Korea, Rep. of	62	38	14	24
Mexico	46	54	32	22
Developed country average	66	34	20	14

Source: OECD (2001), Annex B1, table 2.4.

algebraic concepts, who deserves credit and in what proportion? The parents' genes? The child's nutrition? The parents' motivation and efforts? The child's peers? The child's primary school math teachers? Another teacher who motivated the child to do well in all subjects? The child's current algebra teacher?

Nearly all empirical studies of measured learning achievement agree that home background accounts for most of the explainable variation in learning outcomes, especially in primary grades. The same studies disagree widely about how much can be attributed to a child's school. The recent Programme for International Student Assessment study found wide variation in differences in student performance within or between schools (table 7.2). Half or more of the variation in performance across schools was due to variation in students' socioeconomic status, not to factors under school control. In poorer countries the effect of schools is larger—and that of parental background smaller. But, in general, identifying the school's value added is not simple.

Even for outputs easier to specify and measure, not much is known about how inputs affect them. Economists summarize this relationship under the metaphor of a "production function." Little is known about this function because instruction involves human beings—teachers and students—in all their complexity. For instance, there is ongoing, vigorous debate about the relevance of class size for student test scores. Some assert that class size is irrelevant, or nearly so. Some assert that reductions in class size have such a salutary impact on performance that they are a cost-effective means of improving performance.[327] After more than a century of widespread use of classroom instruction, intelligent, well-meaning, and methodologically sophisticated researchers are still debating such a seemingly simple issue. That shows how truly complex the research questions are—the results will vary across time, content, and context.

Assessment systems

National assessment systems are essential for monitoring educational achievement. But performance measurement is as complex as the many goals societies have for their schools. Performance measurement is *not* an attempt to reduce the output of schooling to the ability of students to answer questions on standardized examinations. The dangers of test-based school accountability have been debated for at least 140 years (box 7.2). You get what you pay for. But there are also dangers in too little attention to performance. It is important to distinguish among the three types of assessment: sample-based assessments to track performance over time, "gatekeeper" examinations that are high stakes for students, and assessments of school performance.

Tracking progress. One way to strengthen the compact between policymakers and education providers is to develop measurement and reporting systems that allow investigation of value for money. Standardized examinations are a relatively inexpensive device for monitoring progress and effectiveness. But few education systems in the developing world have disaggregated the cost of running a school, and even fewer know how that cost is associated with learning. So there is almost no reporting based on such measurements. The lack of information leads to an inability to act accordingly.

When the data are revealed, they can be surprising. One study that generated data relating expenditures and learning at the

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BOX 7.2 *Test-based accountability—nothing new under the sun*

Test-based school accountability might seem like the latest thing. It isn't. British legislation for school funding in 1862 included a system of "payments for results." In addition to a base grant (based on number of children and attendance), schools received a grant for each student who passed a series of tests given by school inspectors in reading, writing, and arithmetic.

Proponents of the testing argued that performance-based transfers were only common sense since public money was involved. As one parliamentary proponent reasoned: paying for performance will either be cheap (because few schools meet the standard) or expensive (because many students have high performance)—but it will not be both expensive and ineffective. Educational historians claim that the pay-ments provided teachers (who at the time had little training) with clear indications of what was valued and tangible awards for achievement.

Opponents raised the same arguments made today. Teachers will "teach to the test" and ignore subjects not covered by the test (such as history and geography). Test-based accountability will lead to teaching methods that emphasize rote memorization and cramming. One educator argued that "payment for results" would "be remembered with shame."

This particular system of "payment for results" was abolished in 1890. But the debate continues today.

Sources: Based on Bowen (1981) and Good and Teller (1969).

Figure 7.4   School success depends on more than spending per student
Primary school pass rate in Mauritania
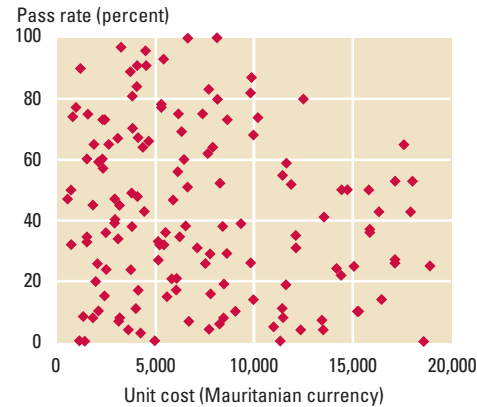
Source: Mingat (2003).

school level in Africa found little connection—Mauritanian schools with similar spending had pass rates of less than 5 percent and more than 95 percent (figure 7.4).

Needed for active management are data—on school costs, on the characteristics of students, and on school performance on cognitive achievement tests. Once implemented, these sample-based systems can be gradually scaled up to provide more census-like measurements.

Gatekeeper examinations.   In most countries examinations are seen as a fair way of allocating limited school places. One study suggests that the impact on student performance of centralized curriculum-based examinations is as large as that associated with differences in parental education or with substantially more formal education for teachers (figure 7.5). Since centralized examinations make relevant information widely available, they can be useful for generating accountability.

The impact of public examinations on the incentives of various actors points to systemic considerations. For instance, teacher training programs often attempt to instill pedagogical techniques that promote higher-order thinking skills. But when gatekeeper public examinations assess only rote memorization, teachers frequently revert to similar methods. And if public examinations have a major impact on students' life

chances, parents will exert pressure on the school system for better examination results. Where public examinations are limited and educationally inadequate, perverse pressures can worsen true educational quality in the interests of better examination scores.

School-based accountability for examination results.   School accountability is controversial—with good reason. There is empirical evidence that accountability mechanisms based on examination results lead to "teaching to the test" and to attempts to manipulate results. Evidence from locations as diverse as rural Kenya (see chapter 11 and box 7.5 later in this chapter) and urban Chicago shows that accountability raised examination scores—but also that teachers manipulated the students taking the exam, and taught to the test.

But teaching to the test is a criticism only if the test is not a reliable assessment of the skills that are the objective of public support for schooling—or if the tests divert teachers from more productive activities, such as teaching higher-order thinking. There is a tradeoff between what the test costs (in design, testing, and scoring) and how well it captures desired schooling output. Tests in some circumstances could divert teachers from more productive to less productive activities, such as "drills." But in many cases performance is so weak that even "less productive" but learning-oriented activities would be an improvement.

Figure 7.5   Centralized exams have a strong impact on student performance
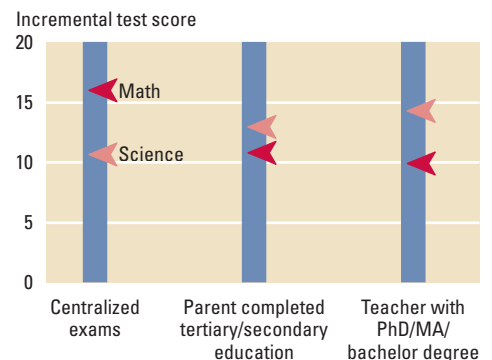
Source: Wößmann (2003).

There are three important technical design issues with school-based accountability. First, the characteristics of students, their peers, and their families are far and away the largest determinants of variation in performance. Any attempt to judge schools on their *level* of performance will therefore be judging the socioeconomic composition of the school—a "good" school might simply have wealthier students. This is true on average. Some schools serving poorer populations perform well or even very well (figure 7.6). And some schools with wealthier students are mediocre.

To focus on school value added rather than differences based on school populations, scores can be empirically adjusted for the composition of the student body (box 7.3). Or assessments can measure *changes* in student performance (which assumes that socioeconomic composition is roughly constant). Or a threshold can be set that all schools—whatever their student composition—are expected to achieve.

A second design issue in school-based accountability is statistical sampling. In many schools the number of students is small enough to result in considerable variability. That means that even schools with strong improvements over time will have years when scores are lower than in previous years—simply because of the mix and number of students. It also means that a program of rewards or punishments for performance would disproportionately reward and punish small schools relative to large schools. The third design issue is whether to reward good performance or intervene in bad performance—or both.

School autonomy

Accountability and autonomy are twins. Traditional public sector bureaucracies have little autonomy because accountability is linked to rules and procedures, which allows for little discretion. The heads of individual schools are often bound by process requirements and so have little autonomy to actively manage their schools—to define a mission, choose instructional staff, innovate, or encourage performance. Granting greater autonomy requires new forms of accountability based on outputs and outcomes. The roles of the ministry of education can be unbundled so as to separate education policy from the operation of schools. A more explicit compact relationship can be made with organizational providers, perhaps even with multiple providers within the same jurisdiction. This structure can give clearer guidance on desired outputs and outcomes, freeing school heads and teachers to pursue defined goals.

Nicaragua created autonomous public schools guided by a school directive council comprising the school head, elected teachers, parents, and students. The school retained revenue from students, and the council could make decisions about personnel, finance, and pedagogy. The average school autonomy reported by these schools was between that reported by traditional public schools (very little) and private schools (almost complete). The degree of self-reported school autonomy was positively correlated with student performance on test scores at the primary level (though not at the secondary)—but autonomy on paper was not. In a study in Chile very little of the variation (less than 1 percent) in three measures of self-reported autonomy of teachers was *between* the four types of schools—public, private voucher, private paid, and Catholic voucher. More of the variation was between schools of the same

Figure 7.6   In Chile, good schools service students from every level of socioeconomic status

Fourth grade basic SIMCE score
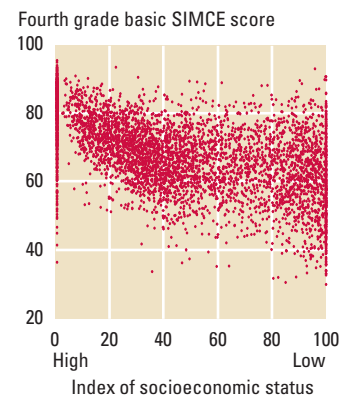
Note: The SIMCE is a standardized test in Chile.
Source: Mizala and Romaguera (2000).

BOX 7.3   *School-based performance awards in Chile*

Since 1996 Chile has had an award for "top-performing" schools in each region. Ninety percent of the award goes directly to teachers (in proportion to their hours of employment), and 10 percent is allocated to the schools. The awards are given every two years.

Schools are divided into comparison groups within each region of the country based on location (rural, urban), education level (primary only, secondary with primary), and socioeconomic status of parents (according to information collected as part of the examination and an official "index of vulnerability"). In 2000–01 this classification produced 104 comparison groups. In this way the performance of poor rural schools is not compared head-to-head with that of richer urban schools. Analysis suggests that this procedure diminishes the correlation between socioeconomic status and awards.

Next, an index of school performance is calculated based on standardized tests in Spanish and mathematics in grades 4, 8, and 10. The index is weighted for average test level (37 percent) and improvement in test scores (28 percent) and includes other criteria such as "equality of opportunity" (22 percent)—based on student retention and no "discriminatory practices"—and "initiative" (6 percent)—based on regular development of group pedagogical activities.

The program has been through three rounds of selection, with 2,520 schools having received awards once, 1,084 schools twice, and 360 schools in all three rounds.

Source: Mizala and Romaguera (2002).

The Third International Mathematics and Science Study (TIMSS) created a data set on student performance and characteristics and on institutional characteristics of the schooling system such as use of centralized examinations and central, local, and school decisionmaking responsibilities. Analysis of the performance of more than 266,000 students from some 6,000 schools in 39 (mostly OECD) countries yielded the following conclusions:

- Money cannot buy quality in present schooling systems.
- Incentives are the key to success.
- Schools should be allowed to decide autonomously on operational tasks.
- Schools must be made accountable.
- Teachers' incentives have to focus on improving student performance.
- Competition between schools creates incentives for improving performance.

A second study, the OECD Programme for International Student Assessment, assessed "young people's capacity to use their knowledge and skills in order to meet real-life challenges, rather than merely looking at how well they mastered a specific school curriculum." The study collected performance data on 265,000 students in 32 (mostly OECD) countries along with information from students and principals about themselves and schools. The conclusions for what schools can do to make a difference were:

- Students' reported use of school resources was more closely associated with performance than principals' reports of resource deficiencies.
- The ratio of students to teachers matters where it is high, while in the typical range there is a much weaker association with performance.
- Three factors of school policy are associated with better student performance: school autonomy, teacher morale and commitment, and other teacher factors such as expectations.
- Three classroom practices reported by students show a positive association with performance: the extent to which teachers emphasize performance, teacher-student relations, and the disciplinary climate of the classroom.
- Successful students are more likely to do homework.

Sources: Wößmann (2003) and OECD (2001).

type (between 15 and 18 percent), and most was between teachers in the same school.[328]

Teacher autonomy in classroom tasks consistently emerges as a determinant of success (box 7.4). The principles developed in chapter 6 are apt: discretion and decisionmaking power need to be delegated to those with the relevant information and professional skills. Centralized control of teacher assignment and assessment can cause bureaucratic paralysis. But making schools autonomous in curriculum design, examinations, assessment, and finance can lead to excessive variability across schools.

Innovating, evaluating, and scaling up

The goal of school autonomy and accountability is to create a system in which organizational providers have strong, sustained incentives to improve outputs. The problem is not a lack of innovation—there is a continual stream of new modes of teacher training, new teaching methods, new instructional inputs, new use of the latest technology. The problem is that there is too little systematic learning from innovation and too little replication of proven innovations.

The contrasting use of rigorous evaluations in health and education is striking. In most developed countries no drug can be used until it is proven safe and effective, and the standard of proof is the randomized double-blind clinical trial. But in schooling, instructional practices for hundreds of millions of children can be changed because a new technology appears promising. Or because a group of experts thinks so. Or because the practice has been tried in a pilot program (and subject to "Hawthorne" effects, the nonreplicable impacts that occur simply as a result of the increased attention from any innovation). Or because it has been shown to be statistically correlated with success, subject to all the dangers of improperly inferring causation. There is strikingly little use of randomized controlled experiments as a routine management practice—despite its eminent feasibility for many classroom practices (box 7.5).

A recent example of evaluating a schooling innovation illustrates the power of flexibility in design—and the power of evaluation. A remedial education program, established as a collaboration between the government and a nongovernmental organization (NGO) in two cities in India (Mumbai and Vadodara), hired local women to teach catch-up classes for students who were falling behind. The program was inexpensive—$5 a child a year. A rigorous evaluation based on the randomized design of the program found it very effective at boosting learning, especially among poorer children. The evaluation showed that, at the margin, extending the program would be about five times more cost-effective than hiring new teachers.[329] The program is implemented now in 20 Indian cities, reaching tens of thousand of children.

But "there is a particular irony to education reform . . . [as] pockets of good education practice . . . can be found almost anywhere, signifying that good education is not the result of arcane knowledge. Yet the rate of uptake of effective practices is depressingly

BOX 7.5 *Randomized experiments in Busia district, Kenya*

Since 1996 a group of researchers has been working with a Dutch nonprofit (International Christelijk Steunfonds) supporting schools in rural Kenya to estimate the impact of various interventions. Through random selection some schools were chosen to implement the interventions first, with the other schools to follow. This allowed the researchers to test a number of ideas.

Textbooks. Everybody knows that textbooks are important and that their lack is a major constraint on effective instruction. Yet the first study found "no evidence that the provision of textbooks in Kenyan primary schools led to a large positive impact on test scores, nor is there any evidence that it affected daily attendance, grade repetition, or dropout rates." Does this mean that textbooks don't matter? No. Although textbooks did not increase the performance of the *typical* (median) student, they did improve performance for students who did the best on the pre-test. This suggests that because the textbooks in this instance were too difficult for the typical student, the books did not matter.

Teacher incentives. Everybody knows that teacher incentives are crucial since teachers are undermotivated. Yet a study on incentives for teachers based on student test scores found that "teachers responded to the program primarily by seeking to manipulate short-run test scores. . . . [T]eachers' absence rates did not decline, homework assignments did not increase, teaching methods did not change." Does this mean that teacher incentives don't matter? No. Teachers did change their behavior—they "conducted special coaching sessions and encouraged students to take the test." This suggests that you get what you pay for—whether you like it or not.

Deworming. Deworming does not feature widely in the education effectiveness literature. Yet a randomized trial of an inexpensive medical treatment for hookworm, roundworm, whipworm, and schistosomiasis found that it reduced absenteeism by a quarter. Does this mean that health is all that matters? No. While attendance improved, test scores did not.

Three observations. First, things that everybody "knows" to be important did not work as planned, whereas the intervention with lower expectations had large impacts. Second, these results from a hundred schools in an isolated area of Kenya have been getting enormous academic attention because there are so few rigorous, randomized evaluations of schooling interventions. Third, the findings from each intervention do not reveal universal, immediately generalizable results, but they reveal that specifics matter and that learning about what works needs to be local to be useful.

Sources: Miguel and Kremer (2001); Glewwe, Ilias, and Kremer (2000); Glewwe, Kremer, and Moulin (1997).

low and effective schools are often found just a few blocks from dysfunctional ones."[330] The U.S. Agency for International Development (USAID) attempted to refocus its efforts in education in Africa from "proximate determinants" to a more systemic approach that focuses on internally driven identification and scaling up of good practices. A recent review of USAID projects based on systemic reform found, not surprisingly, that implementation was difficult because it went to the heart of the relationships of accountability among actors in education—and that was intensely political. Even so, recent work at USAID explores solutions to the challenges of linking authority, accountability, and transparency to strengthen basic education through institutional reform. There are several ways of expanding and scaling up good practice.[331] The most obvious way is to use greater school autonomy—leaving scope for school management to define a school mission, mandate, and tactics—and greater accountability to enable the monitoring of performance. The autonomy and accountability create incentives to adopt proven successful practices, to evaluate the effectiveness of homegrown initiatives, and to create a sense of pride and commitment in the school.

Accountability is, of course, difficult to define. Is it accountability within the bureaucracy (so that policymakers choose and replace principals based on performance)? Is it the direct participation of parents or school councils in choosing school management? Is it parental choice?

There are alternatives. One is to allow the most competent actors (principals, teachers) to run more than one school. This would allow the more competent to affect greater numbers of children—and reduce the sphere of influence of the less competent. A second way is to systematize a variety of standard-provision models that are easy to replicate and franchise, whether the franchise is a bureaucracy or a private provider. Franchise models should be based on local research on what capable principals currently do in a variety of real settings as well as on citizen dialogue around the emerging models. Models could also be based on statistical analysis of the maximum "output" produced by schools, using the average level of resources that schools can typically mobilize.

None of these approaches to learning about learning is possible without assessments of outputs—not just standardized exams but assessment of all the relevant

outputs of schooling. Nor is any possible without enough organizational autonomy for individual schools or groups of schools to decide how best to act.

Organizational and frontline providers: management

Managing for effective services means getting people with the right skills and training in place (capacity). It means giving them the right infrastructure and inputs to work with (logistics). And it means ensuring the motivation (both extrinsic and intrinsic) of frontline workers. The typical public school is often handicapped in these endeavors in nearly every possible way. Individual school managers often cannot choose their own teachers and cannot dismiss them—even for good cause. Teacher training and capacity building are often ill-designed and poorly integrated, and so become irrelevant. Logistical issues are beyond an individual school's control—with decisions centralized and bureaucratic. Compensation structures tend to be tied to seniority and level of education or training, not to demonstrated mastery of skills. And although pay, or other extrinsic motivation, is not the only motivator for education professionals, the typical structure of working conditions and pay undermines even the intrinsic motivation of providers.

Employment relationship and structure of compensation

There is no single best approach to compensation, capacity building, and classroom autonomy. Indeed, one of the major benefits of greater autonomy is that it allows more experimentation and more flexibility in implementation and replication. With school autonomy, organizations can try different compensation schemes, training methods, and modes of parent-teacher interaction and can evaluate them relative to output and outcome objectives. If the public sector can specify what it wants from a school—a clear compact—it can leave teacher compensation to school management and let the best system win.

Teacher pay can be too low (where inflation has eroded real salaries to the point where teachers resort to alternative sources of income) or too high (where pay is several times higher than needed to attract a quality pool of teachers). But appropriate compensation involves more than the level of pay. It is the overall attractiveness of the profession and the structure of compensation that motivate performance.[332] Teacher pay is usually linked to factors that show little association with student performance—mainly seniority. Teacher earnings thus exhibit much less variance than earnings of workers in other occupations. Compensation should reward good teaching, not just longevity.

Motivation and capabilities

The schooling process is so complex—the difficulties of attribution so severe—that simple proposals of "pay for performance" for individual teachers and principals have rarely proved workable.[333] But a total lack of connection between incentives and performance allows excellent teachers working in adverse circumstances and those who never show up to be paid the same amount. This undermines the morale of good teachers and drives them out of the profession.

But motivation is affected by more than money, as a study of teachers in three types of schools in Merida, República Bolivariana de Venezuela (nonprofits, state, and national), shows. Catholic Fe y Alegria schools—which cater to low-income families—emphasize school autonomy and teacher input in decisionmaking. Even though pay is roughly the same as in state and national schools, teacher satisfaction—and student performance—are much higher (table 7.3).

Enhancing teachers' capabilities is clearly fundamental to good-quality schooling, but experience with teacher training is frequently disappointing, mainly because of too little transfer from training to classroom practice. Teachers need training that lets them do their job better. But autonomy, motivation, and assessments of providers (based on outputs and outcomes) are needed for training to improve outcomes.

Client power

Client power is a weak force in public school systems. Channeled into narrow interests, it has little impact. In nearly all

Table 7.3 Autonomy and outcome in Merida, República Bolivariana de Venezuela, in the mid-1990s

School type	Cost per student and per student hour (bolivar)	Salaries as share of operating expenses (percent)	Teacher satisfaction[a]	Student performance (average of math, reading, writing, percent)	Retention rate, grades 1–6 (percent)
State (*escuelas integrales*)	190, 24	95	3.75	40	51
National	160, 32	99	3.57	39	42
Private (Fe y Alegria)	155, 31	88	4.02	53	100

a. Rating of 5 indicates complete agreement with the statement, "I'm satisfied with my work."
Source: Navarro and de la Cruz (1998).

countries parents can choose schools for their children, within limits. But choice has little or no overall impact on school quality because there is typically no effect either on schools that lose children or on those that gain them. Even when parents abandon the public system and pay for private schools—as is happening in many countries—little systemic pressure for change is created because government resources continue to flow into public schools. Direct parental participation in schools is also typically a weak force since there is little about public schools that parents can affect. Often the school head and teachers themselves have little or no autonomy to make changes. Parent organizations are simply a means of mobilizing additional resources for the school.

There are ways to change this, to use client power to improve outcomes. One is to involve citizens directly in the assessment and operation of schools. Another is to use demand-side subsidies to increase access for poor people. A third is to make provider resources depend on client choice—to have money follow students. None is a panacea, but each can be part of a strategy for school improvement.

Direct participation: community involvement in schools

Since students, and indirectly their parents, interact daily with the education system, they have valuable information about provider performance that tends to be ignored in purely bureaucratic systems. Several successful experiences with giving parents a formal role in school governance have heightened interest in this model:

- The emergence of community-run schools in El Salvador showed that they performed as well in test scores and in student dropout rates as schools operated by the ministry of education, which catered to wealthier children (see the spotlight on Educo).
- In Cambodia a donor-financed initiative sought to improve schools by stimulating greater community engagement in schools and using direct budget transfers to schools (box 7.6).
- Evidence from Argentina supports the idea that parental participation together with school autonomy raises student performance.[334]
- NGOs can help both through direct engagement with communities and through creating and disseminating information—as in the system of school information for communities in Nepal assisted by Save the Children-UK.

BOX 7.6 *School improvement in Cambodia*

To improve school quality, the Education Quality Improvement Project in Cambodia uses a participatory approach and performance-based resource management. Operating in three provinces, the project covers 23 percent of the primary school population. Local school communities identify their needs and make proposals for change and investment. Funds are delivered directly to school clusters by the Ministry of Education.

Change management is supported by district-based "animators," who draw general lessons from the experience with the school's quality improvement grants to advise the government on how to improve its education policies. The animators are supported by a network of technical assistants at the local level, who provide pedagogical and organizational support.

The project has stimulated lively dialogue at the school, cluster, and administrative levels on how to improve schools. It has also set in motion a process of change in the administration of schooling and in teaching and learning practices. As a result, unprecedented responsibility has been devolved to school and local administrators.

Source: World Bank (2002c).

Informal and community schools exist in many settings, most often when parents take matters into their own hands and arrange for teaching outside the formal system. This is often supported by NGOs and religious organizations. A recent review of initiatives in Ethiopia points to the potential of this support for expanding access to schooling (box 7.7). The big question is how to link these efforts to the formal system so that informal schools are not a dead end.

Greater parental involvement in school management has its risks. Parents need access to relevant information and the power to effect change. Their focus should be on performance, not on micromanaging the classroom, where teachers should have professional autonomy. It is fairly straightforward for parents to assess whether the instructor is present and not abusive to students. But high-quality teaching cannot be reduced to scripted actions. Parents often have a very conservative perspective on teaching methods and will encourage teaching to the test when there are gatekeeper examinations. Ensuring that the poorest are not excluded from this process is essential—and difficult. Experience with school-based control in South Africa suggests a key role for training parent groups: without the training the more advantaged populations benefited while poorer and less powerful groups lost out.

Direct participation in schools raises the difficult issue of user fees and their relationship to community engagement. Some argue that as long as locally collected fees are retained by the school, fees are a good thing, for two reasons. First, empirical studies suggest that centrally controlled resources are almost universally devoted largely to payroll, while resources collected at the school level raise school quality by much more than equivalent resources from higher levels.[335] A study in Mali showed that paying fees left parents better off (on average) because the value of increased school quality was much larger than the fee itself.[336] Second, if communities are to feel pride in their school and empowered by their participation, then parents should be expected to make some contribution. Payment may come in-kind, such as labor for construction of the school, rather than as direct fees for use.

But these potential benefits of greater community engagement have to be weighed against the apparently large negative effects on enrollments of even very low user fees in poor countries and against the increases in inequality from relying on fees (see box 4.4). Some might argue the ideal is a compromise of a fairly apportioned fee on communities to generate ownership but with significant exemptions for poor households (subsidized from a central fund). Recent experience with such targeting (as in South Africa) suggests that it is difficult to make this work.[337]

Demand-side transfers

Many governments use scholarships or conditional transfers (households receive benefits if children are enrolled) to expand enrollments. The Education, Health, and Nutrition Program of Mexico (Progresa)

BOX 7.7 *Alternate routes to basic education in Ethiopia*

Ethiopia is a large country with a heterogeneous population. Education levels are low: only 24 percent of children complete primary school. There are very few schools in poor and remote areas: only about 30 percent of 10-year-olds in rural areas have ever attended school. But recent innovations sponsored by NGOs show other ways of getting schools to these children.

Programs run by six NGOs reveal how expanding school places is possible even in remote areas—at reasonable cost and without sacrificing quality. The NGO ActionAid proposed adapting school models used by the Bangladesh Rural Advancement Committee in Ethiopia, and since then several other NGOs have sponsored similar programs. The schools share several features:

- Compressing four years of the official curriculum into three years.
- Streamlining the curriculum to reduce repetitiveness and remove elements deemed irrelevant to local needs.
- Using instructional routines that appeal to children, such as songs or teaching in groups.
- Scheduling classes on days and times approved by the community.

- Involving community members in monitoring the attendance of teachers and students.
- Targeting class sizes of about 35 students.
- Recruiting teachers and teaching assistants from local areas and paying them less than professional teachers.
- Spending more on textbooks, other instructional materials, training, and supervision.

The results are promising. Children attending these schools continue on to higher grades. Moreover, learning does not appear to have suffered. Test scores in the second grade were about 20 percent higher than in government schools, and scores in the fourth grade were only slightly lower, even though the schools catered to children from poorer families. All this at a lower cost per student.

Issues remain, however—particularly about scaling up these programs to reach more children, the more so since some initial success was driven by a few energetic individuals.

Source: Ministry of Education Ethiopia (2000).

has drawn considerable attention because—unusual for this type of effort—it was structured to allow rigorous impact evaluations. The program has resulted in substantially higher transitions to secondary school.[338] In Bangladesh a study found that conditional transfers of rice raised enrollments. The program was also cost-effective relative to other interventions, though the government recently moved to monetize the benefits due to concerns about leakage.[339] Indonesia introduced a large scholarship program in response to the economic crisis in 1997. The program helped maintain junior secondary school enrollments.[340]

Conditional cash transfers have proved effective in expanding enrollments, but they have shortcomings. They focus on enrollment without creating incentives for improving quality. To the extent that demand-side transfers use funds that would otherwise have been devoted to school improvement, there is the risk of expanding quantity at the expense of quality. There was widespread concern that school feeding programs in India were "too successful" in attracting students. Schools were flooded with underage children not ready for learning, which put even more pressure on quality at the critical lower grades.

Resources and client choice

The Universal Declaration of Human Rights (Article 26) asserts that parents have a "right to choose the kind of education that shall be given to their children." Despite this apparent endorsement of parental choice, there is little consensus about its role.

In practice, there is a large amount of choice. A substantial fraction of schooling is carried out by a range of private providers: for-profit schools, religious and denominational schools, NGO-operated schools, and community-owned and -operated schools. In some countries the proportion of children in private schooling is rising rapidly—even without public support. In Pakistan the proportion of urban students in public schools fell from 72 percent in 1991 to 60 percent in 1996 to 56 percent in 1998—with most of the shift to private, nonreligious schools (religious schools accounted for only 1 percent). Sometimes there is govern-ment support for these schools—as for Catholic schools in Argentina or Islamic schools in Indonesia—or there is support to parents who choose private schools—as in Chile, the Czech Republic, the Netherlands, and New Zealand.

What kind of relationship should governments have with nonpublic providers? One decision is whether to allow demand-side transfers or scholarships to be used in nonpublic schools. Colombia used scholarship programs for private schools to expand enrollments for poor students. The fact that participants were chosen randomly from a pool of applicants allowed for rigorous impact evaluation, which found significant positive impacts for scholarship recipients.[341] But even though the program was both targeted and apparently effective, it was discontinued—for bureaucratic and political reasons. A second decision involves more generalized support for nonpublic schools. In general, it is hard to say anything about "choice" without provoking controversy, but here are four tries.

General subsidies to private schooling— neither disaster nor panacea. Although there is a wide-ranging and still inconclusive empirical debate about the impact of generalized choice, providing general subsidies to private schooling has never been a disaster—or a panacea. The Netherlands has had full school choice among public and denominational providers since 1920, without terrible repercussions. Chile has had choice since 1980, and while there is some controversy about whether it has produced substantial gains in measured learning outcomes (Hsiao and Urquoila 2002), no one argues it has been a disaster. New Zealand has had school choice since 1991, and in a recent assessment of 32 countries, came in third in math and sixth in reading and science literacy. The Czech Republic and Sweden have had public financing of private schools since the 1990s.

So choice is neither an ivory tower notion that could never work in practice nor an ideological Trojan horse that would destroy public schooling. It is also not a universal remedy. The successful expansion of choice has nearly always been embedded

in a more general program of school reform and improvement.

Parents who exercise choice perceive themselves to be better off. But schooling transmits beliefs and values, which implies a distinction between meeting the collective goals of citizens for publicly financed schooling and satisfying the clients of schooling. Parents acting as citizens may want publicly supported schools to encourage all children to be tolerant and respectful of other people's beliefs. Yet these same parents acting as clients may want their children to receive instruction in the absolute correctness of a particular set of beliefs. A system that satisfies every individual parent's demands as a client might fail to meet the collective goals of citizens for publicly supported schools. Doubts about choice often arise from the impact of schooling on socialization.[342] But this argument cuts both ways: if socialization is chosen by an authoritarian government to repress individual or group rights, choice is all the more important.

Using taxes for private schools requires accountability. While parents should be allowed to choose their child's education and create their own accountability, using taxes for private schools requires public accountability. For choice to be effective in creating greater accountability, parents need timely, relevant information. This will not necessarily emerge spontaneously because it depends on comparable assessments across schools. Policymakers could publicize that a specific school meets minimum standards through easily visible information tools, such as symbols prominently displayed in the school. A more sophisticated approach could involve broadly disseminated census-like information on outputs and outcomes—perhaps normalized by socioeconomic status.

Making choice part of a package of reforms. The public sector always remains an important provider, and choice complements reforms to improve the public sector. Advocates of school choice emphasize the potential beneficial effects of competition—for which there is mixed evidence. But there are other elements as well. Choice as part of a package of reforms can have three benefits:

- The introduction of choice forces an unbundling of roles. To have effective choice the government must be explicit in its dual role of setting the rules for all providers and managing schools as the largest provider.
- Deciding how to regulate private providers can force a discussion of the output and outcome goals of education that can improve accountability in all schools.
- And choice often creates new acceptance of assessments for monitoring providers— which can be expanded to all schools.

Designing choice around the politics. Policy decisions about choice are intrinsically political. The United States prohibits public support to schools run by religious organizations. Cordoba, Argentina, has actively supported Catholic schools.[343] Holland explicitly supports both Catholic and Protestant schools. Rather than being based on the perceived relative effectiveness of the different schools, these policy choices seem to reflect differing public opinion at the time the decisions were taken—for example, historical concern about Catholic influence among the Protestant majority in the United States, a predominantly Catholic population in Cordoba, and a more even distribution of religions in Holland. Similarly, the suppression of Islamic schools in some countries and support for them in others, or the decision to ban private schools in Pakistan and Nigeria in the 1970s, has little to do with school effectiveness. The promotion of choice through vouchers in the Czech Republic has been seen as a reaction to the use of schools for political indoctrination.

If school choice is a political given, an effective school system can be designed around that constraint. If school choice is politically precluded, an effective school system can be designed around that as well.

Getting reform going

This chapter is about changing the relationships of accountability to produce better educational outcomes by creating the insti-

tutional conditions for the technically right things to happen. But how can institutions be changed? How do openings for reform get created and exploited? Decentralization can create opportunities. Reform champions can emerge from political, business, professional, or parental interests. And teacher groups can promote—or resist—change.

Decentralization

Decentralization can be driven by a desire to move services closer to people. But success depends on how it affects relationships of accountability. If decentralization just replaces the functions of the central ministry with a slightly lower tier of government (a province or state), but everything else about the environment remains the same—compact, management, and client power—there is little reason to expect positive change. The assumption is that decentralization works by enhancing citizens' political voice in a way that results in improved services. But this could go either way on both theoretical and empirical grounds. Decentralization is not magic. It must reach the classroom. And it will work only to the extent that it creates greater opportunities for school reform (chapter 10).

Reform champions

Getting education reform on the agenda is no mean feat, and getting reform politically supported and implemented is even more difficult. While individual parents are powerful advocates for their children, that does not necessarily translate into system improvement. Educators and progressive forces among teachers often emerge as champions of education reform because they are most acquainted with the problems inside the classroom and school. But it is much easier to mobilize educator support for certain types of education reforms (system expansion, increased resources, pedagogy improvement, technical curricular reform) than others (increased choice).[344]

Local or national politicians or technocrats can also be forces for education reform, particularly if they perceive it is strongly linked to economic performance. But it is much easier to mobilize technocratic policymaker support for certain types of edcuation reform (narrow accountability) than others (pedagogical improvement).

Teachers and teachers' unions. Effective teachers are the backbone of any educational system, but how can the power of teachers be harnessed for educational improvement? Some believe that teachers have too little power, arguing that educational reforms ignore teachers. Followed through, this view can lead to reforms that ignore classroom and school-level realities, further demoralizing teachers and undermining reforms. Others believe that teachers, especially teachers' unions, have too much power and focus exclusively on wages and working conditions (box 7.8). Both sides can marshal empirical evidence. Much of the debate stems from the joint function of teachers' unions as professional organizations, which exist to promote efficacy, advance professional knowledge, and advocate views in public policy; and as agents of collective bargaining, which emphasize resources and working conditions.

B O X 7 . 8 *Education reform and teachers' unions in Latin America*

Reforms to promote greater parental involvement, more school autonomy, more emphasis on results, and changes in the training, selection, assignment, and compensation of teachers are politically explosive—particularly with teachers' unions. A study of five attempts at education reforms that included many of these elements in Latin America in the 1990s found that teachers' unions opposed nearly all of them—emphatically and stridently.

"Teacher's unions in Mexico, Minas Gerais, Brazil, Bolivia, Nicaragua, and Ecuador followed similar strategies in opposing education reform. All used strikes to assert their power …against unwanted changes. The power to disrupt public life, to close down schools and ministries, to stop traffic in capital cities, to appeal to public opinion—were familiar actions to them." In April 1999 the announcement by the Bolivian Ministry of Education of its intention to transfer teacher colleges to public universities set teachers and students at those colleges "rioting in the streets, breaking windows, attacking police, throwing rocks, and setting cars on fire" (images the government used to mobilize public opinion against the unions).

Teachers' unions wanted governments to address the issues of teachers' wages and working conditions and were concerned that decentralization and school autonomy would intrude on more familiar relationships and negotiations between a centralized school administration and a centralized union.

Even when governments pushed reforms through, conflicts with the unions made implementation problematic, since successful reform requires teacher participation.

Source: Grindle (forthcoming).

In too many countries discussions between the government and teachers' unions are no different from discussions between a large company and its unions. The relationship between policymakers and teachers' organizations needs to shift from a pure bargaining game to a positive-sum game. This is easier said than done. As professional development bodies teachers' unions can reinforce professional ethics and mutual accountability. They can be used to organize teacher input on technical issues of educational reform, such as assessment, classroom autonomy, student discipline, and teacher training. If unions refuse to take on that role, preferring to concentrate on wages and working conditions, there are no firm guidelines for how reformers should cope with that.

Educación con Participación de la Comunidad en El Salvador

By contracting directly with communities, El Salvador dramatically increased the primary school enrollment of children in poor and remote areas—without reducing the quality of learning.

El Salvador was wracked by civil war throughout the 1980s. Some 80,000 people died—in a total population of roughly 5 million—and many more were wounded and disabled. Income per capita fell almost 40 percent between 1978 and 1983.[345] In 1989 the conservative Republican Alliance Party won a majority in the national assembly, with Alfredo Cristiani as president. Despite contentious negotiations, a peace accord was signed in January 1992.[346]

The war had severely damaged the education system. Communication between the central ministry and schools broke down, supervision collapsed, and many teachers, viewed by some as government "agents" and by others as agents of social opposition, abandoned their posts. By 1988 more than a third of the country's primary schools had closed.[347] And by the end of the war some 1 million children were not in school.[348]

Establishing Educo— Education with the Participation of Communities

The Ministry of Education quickly identified expanding access to basic education and raising its quality as central goals— both to rebuild national unity and to promote long-term economic development. Minister of Education Cecilia Gallardo de Cano, a reform proponent from the "modernizing" wing of the Republican Alliance Party, was intent on lessening the distrust between former combatants.

But skepticism was high. The Ministry of Education was not trusted in many parts of the country and by organized groups such as the National Association of Teachers. Expansion of the traditional education system was viewed suspiciously as a covert means of reasserting national control and building political support in opposition-dominated areas.[349]

During the war many communities had recruited local teachers and established community schools, bearing the cost themselves and paying teachers when they could. The government seized on this model of community-based schooling as the basis for a formal program that would be financially and administratively supported by the ministry: Educación con Participación de la Comunidad, or Educo, with the goal of encouraging the establishment of preschools and primary schools, or classrooms in existing schools.

Begun in 1991, Educo targeted 78 of the country's poorest rural municipalities (of 221 urban and rural municipalities). By 1993 the program was expanding to all rural areas, including many areas formerly under opposition control. But not all of the "*popular* schools" established during the war were incorporated into Educo. Some observers claimed there was selective inclusion based on political favoritism; others saw not incorporating *popular* schools into a government program as a way of sustaining spontaneous community-based education.[350]

Each Educo school (or section within a traditional school) is operated by a Community Education Association (ACE)—an elected committee made up primarily of students' parents—that enters into a one-year renewable agreement with the ministry. The agreement outlines rights, responsibilities, and financial transfers. The Ministry of Education oversees basic policy and technical design. Using the money directly transferred to them, ACEs select, hire, monitor, and retain or dismiss teachers. Teachers at Educo schools are hired on one-year renewable contracts. Parents are taught about school management and how to assist their children at home.[351]

Three-quarters of new enrollments

Educo succeeded in many respects. From a pilot phase of six ACEs in three departments, it scaled up nationally to all of the country's departments by 1993. Rural primary enrollments increased from 476,000 in 1992 to 555,000 in 1995—with over 75 percent of the new students enrolled in Educo schools (figure 1). By 2001 there were almost 260,000 students enrolled in Educo primary schools, 41 percent of all students enrolled in rural schools—and more than 100,000 children enrolled in Educo preschools, 57 percent of all children in preschool.

Even as enrollments increased rapidly, there is little evidence that learning quality suffered. A survey of 30 Educo primary schools and 101 traditional schools in 1996 found no significant differences in average math and language test scores among third graders in the two types of schools.[352] A follow-up study in 1998 found that grade promotion and repetition were similar across the two types of schools as well.[353] As the innovation matured, the institutional arrangements that it introduced took hold and ensured rapid expansion of school places and enrollments of poor children, seemingly without a substantial cost in quality.[354]

Parent visits to classrooms made much of the difference

That Educo schools served the poorest of El Salvador's students, in the poorest areas, makes these results all the more astonishing. How did they do it? Using retrospective data that allow controls for child, household, teacher, and school characteristics—
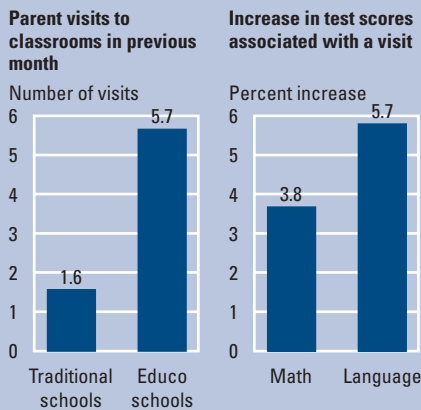
Figure 1   Students enrolled in traditional rural and in Educo primary classes

Thousands of students
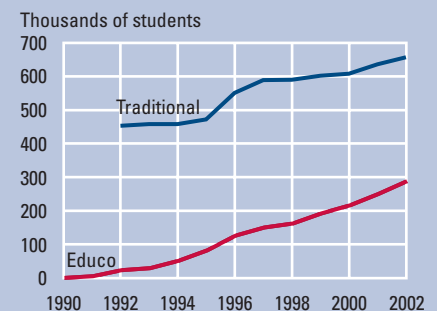
Note: Figures for 2002 are estimates.
Source: El Salvador Ministry of Education.

Figure 2 Educo promoted parent involvement, which boosted test scores

Parent visits to classrooms in previous month

Number of visits

Increase in test scores associated with a visit

Percent increase

Source: Adapted from Jimenez and Sawada (1999).

and statistically adjusting for the fact that unobserved abilities of children might systematically differ between the two types of schools—researchers found that community involvement explains much of Educo's success.

Parents are more active in Educo schools. And their involvement affects learning (figure 2). Each classroom visit by parents was associated with significantly higher math and language test scores regardless of the type of school. Parents were more active informally as well: they were more likely to meet with teachers or to assist teachers in monitoring attendance or maintaining school furniture.[355]

How did Educo and parent involvement affect test scores? At least part of the story is that teachers were less likely to be absent in Educo schools (averaging 1.2 days of absence a month rather than 1.4 days). Students in Educo schools were also absent less (three fewer days a month) than students in traditional schools.[356] In addition, Educo's more flexible compensation scheme resulted in greater variability in teacher earnings, which suggests that parent associations used compensation to motivate greater effort among teachers.[357] Offering or withholding future employment itself was an incentive, and one that ACEs used. Turnover among Educo teachers was high, which suggests that job loss was not an idle threat.

Converging with traditional schools

Educo's administration has become embedded in the Ministry of Education, and Educo has developed into a major schooling model in the country. Aspects of traditional and Educo schools have been converging. Traditional schools now have more parent participation in school governance and management, and are more autonomous with supporting block financing. Similarly, the pay packages of teachers are more similar: Educo teachers receive the same salaries and benefits as teachers in traditional schools. Even so, a key distinction remains: Educo teachers are hired (and potentially fired) by parent committees while those in traditional schools are not.

Is the Educo model applicable elsewhere?

Educo's achievements might appear idiosyncratic. The end of a bloody civil war that had thrown the traditional education system into chaos opened up a unique opportunity to change the way schools were managed. Based in part on coping strategies during the civil war, El Salvador had a history of community involvement in school management. Indeed, the community associations appear to have worked better in places that had prior experience in community organization.[358] In addition, in the aftermath of the war there was an unusually large pool of educated people without jobs (coinciding with the rapid expansion of university places fueled by opening higher education to the private sector).

These factors suggest that the Educo model might not be directly replicable in a different setting. But some lessons are general. First, with political will it is possible to change the relationships between the actors in basic education. Second, schools can be transformed to work in ways that promote enrollment, participation, and learning—even for children from the poorest households. Third, getting parents to participate effectively in managing schools can help overcome some of the potential pitfalls in the provision of education services—especially monitoring schooling in remote areas. Fourth, it is possible to scale up small innovations to have a significant impact on national outcomes.