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ABSTRACT

Education System Reform in Pakistan: Why, When, and How?

Pakistan’s education system faces long-standing problems in access, quality, and equal opportunity at every level: primary and secondary schools, higher education and vocational education. In spite of recent encouraging trends, such as the rapid spread of private schooling and an expansion of higher education opportunities, systemic reform remains stubbornly elusive. The inability of successive governments to reform the system has created severe constraints for Pakistan’s economic and societal development. An inability to act now will increase the problems manifold in the future, due to a burgeoning youth population and increasing competitive pressures from other developing countries that are devoting more attention to education.

We discuss in this paper the imperative for education system reform in Pakistan, and articulate why a window of opportunity exists at this time for all stakeholders – government, civil society and donors – to initiate reform. We emphasize, however, some key messages. One, that reform must tackle all sectors of the education system – primary/secondary, higher education and vocational education – as Pakistan does not have the luxury to delay reform in one sector until the other sectors improve. Two, reform in every sector must be systemic – i.e. with well-defined goals, focus on a minimal set of areas such as governance, financing, human resources, and curriculum and address them all together, rather than piecemeal. Three, implementation is the all-important Achilles’ heel, where Pakistan has limited resources and has often foundered on the rocks. But as we discuss, there are important examples demonstrating that success is achievable, if government and civil society have the will to initiate and sustain reform.

JEL Codes: I21, I25, I28, H52

Keywords: education, economic development, educational reform, Pakistan

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Pakistan’s education system faces many well-known problems. At the primary and secondary level, both access and student achievement are low—by international standards as well as the standard of meeting Pakistan’s broad development challenges; and future outlook is pessimistic—with Pakistan likely to fall well short of the Millennium Development Goal (MDG) of achieving universal primary education by 2015. Teacher preparation and teacher attendance at schools are inadequate. Stubborn inequalities in access, quality, and educational outcomes persist across gender, across income, between urban and rural schools, and among the country’s four provinces. These inequalities create some startling disparities: for instance, Punjabi urban males completed primary school in the early 2000s at a rate of 65%; but only about 10% of rural Balochi or rural Pathan females did so. New data on these disparities provide some encouragement but there is still a long distance to go in eliminating them.

The higher education system fares no better, in spite of strides made in the past decade. Enrolment stands at about 8% (including two-year colleges) of the age cohort, a statistic that compares unfavorably with countries such as India at 18% and Malaysia at 42%. The problems in this system are legion: low quality of faculty, low student motivation, rote learning, outdated curriculum, poor student discipline in public universities, lack of funding, lack of research, and so forth. As a result, a large majority of Pakistani graduates emerge from universities without the technical or social skills needed for them to be strong contributors in the workplace or society, either in Pakistan or on the global stage.

Vocational education in Pakistan is even more marginalized. Less than 1% of the population has ever received technical education or vocational training. For those who have, quality has been uneven. More than 75% of the graduates have some foundational skills but no marketable skills for employment. Poor administration, lack of interaction with industry, and the outdated infrastructure of public institutions have been blamed. Such issues, along with those that bedevil the other levels of education, explain why Skilled Workforce Indicators such as ‘poor work ethic’ and inadequate education rank as two of the top 10 most problematic factors for doing business in Pakistan, according to the World Economic Forum’s 2012 Global Competitiveness Report.

These problems are not new or unknown, and various Pakistani governments have tried, with questionable resolve, to respond. Pakistan in fact has a long history of failed reforms and educational development plans. As early as 1959, the National Commission on Education produced a report that outlined the problems in Pakistan’s educational system and recommended reforms. By and large, the problems identified in that report remained unaddressed and have persisted through the Government of Pakistan’s educational policies of 1970, 1972, 1979, 1992, and 1998. These problems have also

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3 World Development Indicators 2013, World Bank.
survived more than eight five-year development plans that, among broader development efforts, aimed at resolving the problems in the education sector.

The long neglect has made these problems graver than ever before. In a world in which many countries (including in the developing world) are moving ahead quickly in terms of their economic and social development, Pakistan risks falling ever further behind if it cannot educate its young people effectively. Moreover, the challenges to Pakistan’s education system are about to multiply, given that the number of young people is projected to rise significantly in the coming decades. The current education system in Pakistan is for the most part unable to educate the existing and the coming large numbers of students so that they are fully functionally literate, are able to contribute productively to the economy, and are fully aware citizens, able to constructively contribute to overcoming the country’s vast development challenges.

Fortunately, Pakistan is not doomed to follow this scenario. It has enormous potential, but we believe it will need to act quickly because a unique opportunity exists to initiate educational reforms now. We also believe that Pakistan no longer has the luxury for piecemeal reforms; rather, the whole system (see Box 1) must be tackled, simultaneously, with all stakeholders – the government, donors, youth, parents, employers, and workers. This chapter articulates that opportunity for reform and summarizes the current state of education, including challenges raised by recent developments. It then focuses on how to design reforms at the system level, how to initiate them, and how to sustain them to overcome the inevitable obstacles that will arise.

**Box 1: The education system**

By the system of education, we mean the collection of individual institutions that are involved in delivering formal education (public and private, for-profit and non-profit, onsite or virtual instruction) and their faculties, students, physical infrastructure, resources and rules. We also include the institutions that are directly involved in financing, managing, operating or regulating such institutions (like government ministries and regulatory bodies, central testing organizations, text book boards, and accreditation boards). Finally, in an education system, we include the rules and regulations that guide the individual and institutional interactions within these institutions.

This description is not meant to strictly circumscribe what is and is not within the educational system. There will always be fuzzy areas where judgement will need to be exercised on whether an entity is or is not part of the educational system. For instance, NGOs and think tanks dedicated solely to educational advocacy, or private watchdog groups that focus mainly on education might be reasonably considered part of the educational system. In addition, the system is not closed to the outside. It is linked both on the input and output side to the labor market (faculty as inputs and students as outputs).

One way to view linkages in an educational system can be seen in a 2000 World Bank report on higher education in developing countries. An even more expansive notion of the educational system is

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There the education system is also defined to include employers, families of students, and non-formal education. This inclusiveness is useful as it suggests reform mechanisms for the education system that can strengthen the demand side of education, where parents and civil society organize themselves to demand better planning, delivery and monitoring of their children’s education.

Opportunity for reform
Given the rather dismal history of educational reform in Pakistan, a pragmatic question is if anything can be done, and if it has any reasonable chance of success. We believe the answer is a qualified yes, as several forces both within the educational system and in the broader polity in Pakistan have come together to create a window of opportunity for education reforms to materialize.

The first force for change is the rising expectations of the Pakistani public. Pakistan’s educational deficits – along with the country’s inability to provide productive work to all those who are educated – have led to widely unfulfilled expectations. Partly because of technology and global connectedness, the generation that grew up in the last decade, the one that is growing up now, their parents, and businesses and leading thinkers are much more aware of global currents, and of their own disadvantage with respect to other countries. Rising economic insecurity has added to the anxiety of parents and youth about their future. Pakistan’s rapidly growing population has made these problems all the more acute. Although the share of 15- to 24-year-olds is currently at its peak and will be declining in the coming decades, the absolute size of that cohort is projected to grow from about 38 million today to about 43 million in 2035. Young people, and indeed all age cohorts, will increasingly expect and demand that the country rapidly improve access to, and the quality and relevance of, its education system at all levels.

The second force is a rapidly evolving political system in which major actors are adjusting to new expectations. Pakistan’s checkered history of governance – in which the military ruled the country for more than half of its 66-year history – never allowed democratic norms to stabilize. Interim civilian governments, with limited exceptions, were typically weak and insecure. In the limited time and perceived autonomy they enjoyed, their focus was mainly on rent extraction and personal gains, in part because few expected to go back to the electorate to seek re-election based on performance, as the military was often a more important power broker.

This has now changed. The public’s power is increasingly the deciding factor in who comes to and remains in power. For instance, in spite of developmental initiatives, the end of the last military government (1999-2007) was brought about largely through popular discontent. The last democratic government (2008-2013), in spite of making important legislative gains, was emphatically voted out by the electorate—a signal that was widely interpreted as a vote of no confidence in its performance in

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Consequently, the new government appears overtly conscious of the fact that it must deliver, rather than just declare, and be seen to deliver on services demanded by the Pakistani public, including education for Pakistan’s children. How well they can do remains to be seen.

The new government also knows that it will be kept in check by a highly active judiciary. The higher judiciary – historicallypliant to the military and other political exigencies – has become aggressively independent since 2007, actively holding public officials to account. This has two significant implications for implementation of reform in the education sector. First, with the passing of Article 25(A), it is possible for the public to go to court about being denied basic education. Second, government and bureaucracy now know that misconduct and corruption in implementation may result in serious and public consequences.

The third force is the rise of a highly active Pakistani media that regularly highlights the dysfunction within Pakistani institutions. It has provided a forum for voicing popular discontent on various issues, including education. Already there are aggressive campaigns for voice and accountability in the education sector led by nongovernmental organizations (NGOs) and the media, that highlight citizens’ and the state’s responsibility to get every child into school, improve the quality of schools, and expose ghost schools. The media have also put politicians and other leaders on notice in terms of accountability, with media reports regularly providing the basis for court cases filed against bureaucratic malpractices. Political leaders, higher courts, and civil society activists are all adjusting to this sharp spotlight of public accountability. The system is far from perfect, and an often over-exuberant media can at times behave as regressive (such as sometimes stoking hysteria about curricular reform), but the point is that political leaders know that there is a new reality and that they can no longer hide behind a cloak of obscurity if service delivery or reform implementation is marred by corruption.

There are also other new and potentially powerful symbols of change. Malala Yousafzai, the Pakistani girl who was shot by the Taliban in 2012 but survived, has become a focusing icon for gender equality in education – not only in Pakistan but globally. The events after her shooting, recovery, and rise to the global stage have challenged perceptions and expanded the discourse in Pakistan about girls’ education in particular, and education in general.

Although forces for change exist, it is not yet clear how much the government can focus on education, versus other highly visible and charged problems, such as the economy, energy, and security crises. Even less clear is whether leaders who have the will to do something about the education system also have the political skill to take advantage of the country’s considerable strengths, to effect lasting change at

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9. For instance, spending on education declined as a percentage of GDP each year from 2008 onwards, from 2.9% in 2008 to 2.4% in 2010. Source: World Development Indicators 2013 (online), World Bank.
the scale needed. This matters greatly because without major, near-term improvements in the quality of and access to education, Pakistan may stagnate in its economic and social development, continue to experience significant challenges to its democracy, fail to build on its strengths, continue to suffer considerable internal strife, and ultimately weaken itself in relation to neighboring countries. Fortunately, Pakistan is not doomed to follow this scenario. But it will need to act quickly, if it is to realize its enormous potential and satisfy the growing demands of its people for better lives.

**The current state: unfulfilled expectations, uncertain future**

Dissatisfaction with the educational system is widespread, but Pakistani youth are especially unhappy. A British Council report in 2009 documented several concerns commonly expressed by Pakistan’s next generation.¹³ About 92% believed improving the educational system is an important issue, and women were particularly concerned about the future of their children. Almost 50% believed they lacked the skills for the modern labor market and many expressed their inability to find an opportunity to gain essential skills. Those who were qualified struggled to find decent employment while battling discrimination and corruption. All of this was expressed as a simmering sense of injustice and hopelessness; in the British Council report, only 1 in 10 expected an improvement in the near future.¹³

Pakistan’s business and leading thinkers are no less dissatisfied.¹⁴ Indicators about education from the annual Executive Opinion Survey by the World Economic Forum (Forum) are dismal. These surveys ask corporate executives throughout the world about their businesses and the social, political, and economic environment in which they operate. Some of these questions focus on the knowledge and capacities of their workforces and the formal and informal institutions that augment those skill sets. As Table 1 shows, almost 1 in 2 business leaders is dissatisfied with the ability of the educational system to support a competitive economy; 6 out of 10 express dissatisfaction with the quality of primary schools; and 1 in 2 with the quality of math and science education. Further, these numbers have stayed roughly steady, and in some cases deteriorated over the last four years of the survey.

**Table 1: Business leaders give low marks to the education system**

(Responses from the World Economic Forum’s Executive Opinion Survey about the state of education in Pakistan)

<table>
<thead>
<tr>
<th>Sample size</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response rate %</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How well does the educational system in your country meet the needs of a competitive economy?</td>
<td>99</td>
<td>97</td>
<td>99</td>
<td>95</td>
</tr>
<tr>
<td>At least moderate satisfaction %</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>How well does the educational system in your country meet the needs of a competitive economy?</td>
<td>43</td>
<td>43</td>
<td>42</td>
<td>45</td>
</tr>
<tr>
<td>Great satisfaction %</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>How would you assess the quality of primary</td>
<td>99</td>
<td>98</td>
<td>97</td>
<td>95</td>
</tr>
<tr>
<td>How well does the educational system in your country meet the needs of a competitive economy?</td>
<td>35</td>
<td>35</td>
<td>33</td>
<td>32</td>
</tr>
<tr>
<td>Great satisfaction %</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>How would you assess the quality of primary</td>
<td>5</td>
<td>9</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>

These numbers suggest that Pakistan is not competitive with respect to the rest of the world in the domain of education, compared to respondent perceptions from other countries. One (largely) independent indicator of this disadvantage is Pakistan’s ranking in the recently released Human Capital Index by the Forum. This index attempts to rank countries in terms of their ability to maximize the long-term economic potential of their workforces. It focuses on four aspects of countries’ environments: education, health and wellness, workforce and employment, and an enabling environment to realize the economic benefits of the human capital. Pakistan ranks 112 among 122 countries in the overall index, all of the lower-ranked countries being in Sub-Saharan Africa (except Yemen). In education, Pakistan is ranked 111 out of 122. India, by comparison, is ranked 78 overall and 63 in education.

**Low enrolment and literacy statistics**

This high level of dissatisfaction stems partly from deficits in access, literacy and student/teacher ratios. In 2011, the net enrolment rate for primary education was only 72% (compared with more than 90% in India and Indonesia) with girls more disadvantaged, as fewer than 67% of girls of primary school age were enrolled. The same trends pertained to secondary school, with only 35% of secondary-school-age children enrolled (and only 29% of girls). By comparison, Bangladesh and Indonesia were doing better with enrolment rates of 47% and 74%, respectively – with no male/female difference in Indonesia and, in Bangladesh, a higher enrolment rate among girls than boys. Tertiary-level statistics tell a similar story: enrolment stands at about 8% (including two-year colleges) of the age cohort, well below that in India (18%) and Malaysia (42%).

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16 The most recent data available for this indicator for Bangladesh are from 1990, when net primary enrollment was 73%.
Literacy data also paint a discouraging picture. Only 55% of adults (and just 40% of women) are considered literate – figures below those of Bangladesh and India and very far below Indonesia’s, where 93% of adults (and 90% of women) are literate. A similar picture emerges for data on literacy among 15- to 24-year-olds, with a youth literacy rate of 71% (and 61% for females), again well behind Bangladesh, India, and Indonesia.

As for student/teacher ratios, the performance is mixed. In primary schools, the student/teacher ratio is roughly 40:1, about the same as in Bangladesh and India, though much higher than Indonesia’s 16:1. In secondary schools, Pakistan’s relative position is worse, with a ratio of roughly 40:1, as compared with about 30:1 in Bangladesh, 25:1 in India, and 15:1 in Indonesia. One area in which Pakistan does not lag is in the share of gross domestic product (GDP) spent on education. At 2.4% of GDP, the country sits in roughly the same range as Bangladesh, India, and Indonesia.

Exacerbating these deficits are other less easily quantified factors. For instance, in Pakistan, like most countries, enrolment in school does not ensure attendance; many students begin a school year but attend infrequently and do not complete the year. Attendance, in turn, does not imply learning; inadequate curricula, teacher absenteeism, and infrastructure deficiencies can thwart even motivated students and well-intentioned administrators. And the quality of curriculum, and the manner of its delivery, means students are taught a memorization of facts rather than inquisitiveness and problem-solving, leaving them less-prepared to meet the demands of a modern economy and society.

**Inequality of opportunity**

Inequalities in access, quality, and educational outcomes have stubbornly persisted in Pakistan’s educational system, across gender and income, across urban and rural settings, and among the country’s four provinces.

Even though girls’ enrolment in primary and secondary education has improved in the past decade, it stills remains below boys’, with significant urban/rural and regional differences. More than 50% of girls in rural areas do not attend primary school, and more than 75% do not attend secondary school. Enrolment rates of boys in rural areas at both the primary and secondary level are about 7 percentage points higher than those of girls, a difference that is fast disappearing in urban areas. Even though rural areas in Punjab and Khyber Pakhtunkhwa are increasing girls’ secondary enrolment at a faster pace than in the past (with enrolments at almost 30% and 23% respectively), rural Sindh is almost stagnant, with an enrolment rate at 10%.  

These inequalities have important developmental consequences for the children. Educated girls are more likely to have skills that allow them to earn more in the labor market; they are more likely to marry later, to have fewer children, and to have them later; and they and their children are more likely to be

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healthy. Educated mothers are also shown to affect their children’s learning outcomes at school.\textsuperscript{18} Emerging evidence also suggests that benefits from girls’ education may actually start even earlier than when they have children of their own, as educated elder sisters can have a significant positive effect on educational outcomes of younger siblings.\textsuperscript{19,20} Overall, the return on investment in girls’ education is higher than that for boys (Table 2).

**Table 2: A bigger pay-off from educating girls**
(Rates of return on investments in additional years of education)

<table>
<thead>
<tr>
<th>Level of education</th>
<th>Rate of return (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>Primary</td>
<td>2.7</td>
</tr>
<tr>
<td>Middle</td>
<td>4.5</td>
</tr>
<tr>
<td>Matric (10 years of formal education)</td>
<td>13.2</td>
</tr>
<tr>
<td>Inter (12 years of formal education)</td>
<td>11.4</td>
</tr>
<tr>
<td>Bachelors (14 years of formal education)</td>
<td>15.4</td>
</tr>
<tr>
<td>MA_more (16+ years of formal education)</td>
<td>15.1</td>
</tr>
</tbody>
</table>

Source: Aslam, Monazza, “Rates of Return to Education by Gender in Pakistan”. Global Poverty Research Group Working Paper. GPRG-WPS-064. Table 7a. No date, but this paper cites a 2007 publication and is based on data from 2002. Uses individual wages earned to determine rates of return but not including other potential social or health benefits.

The continued neglect of rural areas in terms of education also has negative developmental effects. It exacerbates the economic and cultural differences between those areas and cities to the detriment of the country as a whole. Further, since agriculture is about 25% of Pakistan’s economy, a lack of education can hurt the long-term efficiency of agriculture and increase migration from rural to urban areas.

**An evolving system**
The education system in Pakistan has seen a major evolution in the last few decades. Prior to 1972, private providers delivered a substantial proportion of basic education in Pakistan. The ’70s saw a nationalization of most of these private institutions. But a lack of public funding for education, as well as a change in governments, forced a policy reversal. Since restrictions were lifted in 1979, private providers of education have ‘filled in’ gaps where the public sector has failed to deliver,\textsuperscript{21} a trend that has accelerated in the past two decades.


Private school education in fact is now a major phenomenon in Pakistan, with nearly one-third of all students, at both the primary and secondary levels, attending private schools (accounting for approximately 6 million and 3 million students, respectively). These schools span both elite schools catering to the high-income segment of the population, as well as more affordable schools catering to the middle-income segment and low-cost private schools serving low-income families. In addition, philanthropic organizations such as The Citizens Foundation (TCF), Cooperation for Advancement Rehabilitation and Education (CARE), and other organizations are a growing niche attempting to provide quality education to children from low-income families.

The growth of these private schools, particularly low-cost private schools, has been particularly important in Punjab and Khyber Pakhtunkhwa. In Punjab, in net terms, some argue that virtually all the gain in school participation over the period 2004/05 – 2010/11, especially at the primary level, is due to the gain in private school participation.

Within higher education, we have also seen the emergence of good private institutions. For instance, the Lahore University of Management Sciences (established in 1985) comprising schools of humanities and social sciences, business, and science and engineering, has established itself as one of the best business schools in Pakistan. The Aga Khan University (established in 1983) is acknowledged as the country’s best medical school. The Karachi School of Business and Leadership (established in 2010) aspires to be a world-class business school. The Habib University in Karachi (starting classes in 2014) aims to be a preeminent liberal arts university. Important as these initiatives are, in spite of their non-profit status, they cater primarily to the high-income section of the population.

In addition, the infusion of resources and ideas fostered by the Higher Education Commission (HEC) in the past decade has had a salutary effect on a few public universities, such as the National University of Science and Technology (NUST) and Quaid-e-Azam University (QAU) in Islamabad. Admittedly, such universities are a small fraction of the total in Pakistan, and the progress they have made is checkered, but there is nonetheless improvement from their conditions at the turn of the millennium. The HEC also launched the Virtual University (VU) of Pakistan in 2002 as an attempt to circumvent the lack of capacity in existing universities and bring college education to scale. By October 2012, VU enrolment had crossed the 100,000 mark.

Vocational education, in contrast to primary/secondary schooling and the higher education sector, has not yet caught the attention of private providers, although exceptions have recently emerged such as AmanTech in Karachi.22 The government remains the primary provider, with responsibility and authority devolved to the provincial governments.

**Disruptive changes**

Educational governance in the country is in a state of flux because of constitutional changes and political dynamics. In April 2010, the legislature passed the 18th amendment to the constitution which, among other far-reaching changes, devolved a significant number of responsibilities for education to the provinces. Prior to the amendment, primary and secondary education was a shared responsibility of the

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federal and provincial governments, and the federal government had powers to enact and enforce laws related to education. The 18th amendment was initially interpreted as the federal government completely devolving responsibility to the provincial governments, along with the abolition of the federal Ministry of Education (MoE). However, legal challenges were soon mounted and the Supreme Court ruled in November 2011 that education was an obligation of the federal government from which it cannot absolve itself. Consequently, an existing ministry, the Ministry of Professional Education and Trainings, was renamed to form the Ministry of Education and Training (MoET). However, even two years after its creation, the role, responsibility, and authority of MoET is unclear and its relations with provincial ministries of education undefined.

At the higher education level as well, recent developments have created significant governance challenges. Prior to 2000, the higher education sector in Pakistan was overwhelmingly marginalized in favor of primary education. In 2002, the government created a powerful Higher Education Commission (HEC) that helped the sector make huge strides. But the HEC, too, has fallen to the vicissitudes of Pakistan’s political turmoil. Under the last regime, HEC’s budgets were radically reduced and it became party to political conflict when it was asked by the Supreme Court to verify the degrees of sitting parliamentarians. The resulting political enmity left the HEC with few champions in the government. As a result, there were several efforts to disband it or to put it under MoET’s control, which would effectively revoke its status as an independent commission. There were also public rifts about appointments at senior positions within the HEC, with the government and the courts pushing the commission in opposite directions.

At this point, the HEC finds its future role and responsibility uncertain in regard to the higher education sector. For instance, it is not even clear if the HEC is reporting to MoET and thus MoET has ultimate responsibility for higher education, or if MoET is only supposed to channel funding to HEC (and broker its parliamentary affairs) and thus HEC is the final word. Until this challenge of governance is resolved and the new government firmly commits to higher education as a priority, reform in this very important sector of education is unlikely to be feasible.

Designing reform: a systems view
A chapter of this scope cannot offer a detailed blueprint for reform of the entire educational system in Pakistan. Nor should it – any blueprint must have the buy-in of all major stakeholders in Pakistan’s educational system, such as the government, political leaders, and civil society. This is particularly true because any reform will require making important choices about how much effort to spend on different sectors of the education system, what problems to tackle within the sectors, how to address them, and what results to expect from these efforts. What such a chapter can do, however, is to lay out the perspective educational reform must adopt, the broad principles it must consider, propose the ends it should meet and the chief means it could adopt.

Adopt a system focus
At various times in Pakistan’s history, the pendulum of attention has swung from one sector of the education system (see Box 1) to another based on donor interest, prevailing economic theory (e.g.,
focusing on public versus private returns from investments in primary and higher education), or other political flavors of the day. For instance, in the 1990s donors focused primarily on school-level education to the neglect of higher education. In the 2000s, the government of Pakistan poured money into a dilapidated higher education system.

Education reformers in Pakistan must consider that the country does not have the luxury of focusing only on parts of the system. Each of the subsectors of the system – primary/secondary schooling, higher education, and vocational training – has a vital role. Each can expand opportunity for different cohorts of Pakistani youth, enabling them to contribute to Pakistan’s economic growth. It would, for instance, not be in the best interest of Pakistan to focus on school reform now and return to higher education 5 or 10 years down the road. It would also not be wise to neglect vocational training while focusing on the other two sectors first. That said, each sector of the education system has its own constituencies, challenges, and constraints. Therefore, the approach to mobilizing those constituencies, raising resources, and addressing challenges will be very different.

Articulate key principles of reform
Still, we believe some common reform design principles can be applied to all subsectors of the education system. First, any reform must be systemic, i.e. select a minimal set of areas for each subsector (such as governance, fiscal resources, human resources, and curriculum) and address them simultaneously rather than omitting one. Of course, the nature of these areas and thus appropriate solutions will vary across the subsectors. For instance, governance reform for managing and monitoring of schools will likely be more focused on government bureaucracy. In universities, however, it may also encompass the often complicated structures of governance within institutions. Similarly, human resource development is very different for school teachers versus university faculty, in terms of resources required, the time needed, and the eventual roles teachers and faculty are expected to fulfil.

Second, standards of excellence must be tailored to purpose. Systems of education are like terrains, with peaks, valleys, and vast plains. The notion of excellence at the system level is not definable in the same way as it might be for a particular class of institutions. This notion for the system must be defined as “fit for purpose”. An institution is excellent if it delivers well on the purpose for which it was designed, within the constraints it has. In that sense, design of any reform at the system level must recognize that imposing uniform standards of performance may work for subsets of the system, but not the whole system.

For instance, a private school may have the resources and the flexibility to admit only the brightest students to achieve world-class results, but a public school in a rural area may not, as its primary objective is access and affordability within the means it has. Holding them accountable to the same standards may be counter-productive and will in fact generally be infeasible. Similarly, in higher education, not all universities need to be world-class research universities. That would be beyond capacity for most countries, not just developing ones. A teaching university may be excellent if it graduates a large number of students with solid fundamentals, even if its faculty does not conduct substantial research. A vocational institute may be excellent if it graduates a large number of students
who have no trouble obtaining international certification for their skills, even if it does not cover all vocational areas.

Third, implementation resources must be carefully nurtured and protected. This principle is particularly important because of the preciousness of implementation resources in Pakistan. Implementation eventually comes down to people – especially those with the motivation, skill, experience, and stamina to steward the reform effort. Sometimes a promising reform effort fails if one or two key people exit. This is partly because of the difficulty of replacing talent in Pakistan and the high cost of learning for new participants to carry out reforms successfully in Pakistan’s environment. For this reason, it is important for political and civil society leaders to nurture implementers of reform over a reasonable period of time and recognize the pitfalls of attempting to replace teams before the ground gained in reform has been secured.

Since much of the primary and secondary education is handled by the government, two complementary approaches to strengthen implementers of reform would be to identify and empower reformers within the government and give them the time and space to effect reforms in education; and/or bring into the government at very high levels of administration, a few highly talented and proven people from civil society or the corporate sector, with experience in reform, management, or education administration.

Define the goals of reform
Some of the ends any reform effort must seek to obtain are simple to describe and not controversial. Broadly, these must be to (i) increase enrolment, (ii) decrease inequality across gender, income, location (urban/rural), and ethnicity, and (iii) improve overall quality of education. This simple codification, appropriately interpreted, should apply to each sector of the education system (schooling, higher education, and technical education).

Inequality deserves a special note as it is most likely to be overlooked in reform efforts, and also because some of the means employed for addressing other ends may exacerbate the inequalities. For instance, an emphasis on private schooling as a major vehicle of policy may end up further disadvantaging girls in rural areas. Private schools are likely to be the last option for the poor and girls to catch up in rural areas. Poor families will forego private fees especially for girls, so private schools are unlikely to become major instruments of opportunity for poor rural girls. Areas such as these are where the state must take ownership of the problem.

In addition, there may be other legitimate ends that reformers seek to undertake, such as increasing tolerance and civic sense. But these are not measurable in the same sense as the ends listed above. Moreover, because explicit goals inevitably raise explicit challenges by interest groups, goals such as these are perhaps best weaved into the reform effort rather than made explicit.

Delimit the key means for achieving reform goals
Given the daunting number of problems in Pakistan’s educational system, it is easy to get distracted by creating a laundry list of potential challenges and reforms. But such a strategy is unlikely to be informative. Reform processes can often dissipate their energies by tackling too many challenges (some
of which are not strategically important) and by omitting one or more key areas (the absence of which causes the reform in the intended area to fail).

We believe that four areas are key to the development of an effective reform program for the educational system as a whole, and are systemic in the sense that none can be avoided without seriously hampering the outcomes of the reform. Broadly construed, these are: (i) governance (including federal and provincial bureaucracy as well as the appropriate public and private sector regulation), (ii) fiscal resources (including efficient use of such resources), (iii) human resource development (including incentives for teachers and faculty), and (iv) curricular reform. In our view, none of these areas can be implemented without support from a subset of the other three areas. Appropriately interpreted, these areas are relevant to each sector of the education system. Below are some examples of what reform in these areas might entail, described mainly in terms of the school system.

**Governance**

Governance encompasses at least four related areas: (i) delineation of the authority and accountability for government bureaucracy and within educational institutions, (ii) good functioning of regulatory and enforcement frameworks, (iii) creation of new partnerships in the public-private-civil society sector, and (iv) establishment of monitoring and evaluation mechanisms for the system.

At this time, the lines of authority and accountability at the government level are hopelessly confused. Recent constitutional changes (like the 18th Amendment) have thrown the education bureaucracy at both federal and provincial levels into uncharted waters. It is imperative to quickly resolve this confusion, or reform will be impossible to even envision at the system level, let alone initiate.

Governance reform will have to include streamlined regulatory oversight of the private sector, without increasing the bureaucratic burden unnecessarily (which can also create opportunities for corruption) and not hampering the growth of the private sector (which is providing an invaluable service within the education system). The proliferation of many non-government service providers means an ever increasing burden of coordination to ensure that the outcomes of public and private schools are compatible. As the private education sector has grown, so have concerns about increasing potential disparity between public and private education – such as by private schools “stealing away” rich and capable students (and the best teachers), leaving the public schools with poor and underachieving children. Better coordination and oversight of private and public schools is needed so disparities do not reach unacceptable levels. If this is not done, at some point, the inequalities of access may necessitate legislative intervention as has recently happened in India, where 25% of the seats in private schools are now required to be reserved by law for children from disadvantaged families in the neighbourhood.

Governance reform should also focus on new ways of defining institutional partnerships between the public, private, and civil society sectors. Here, some recent initiatives have shown promising results. For instance, the Pakistani government began a program in 2005 in Punjab to expand access to low-cost private schools in a way that enhanced accountability. The Foundation Assisted Schools program of the Punjab Education Foundation gave monthly per-student cash subsidies to schools, which had to waive tuition for all students so as to attract poor families and ensure that a minimum percentage of their
students pass a biannual standardized academic test. An evaluation of this program shows that these subsidies pushed schools to ensure better learning so that they kept their funding.\textsuperscript{23} Such a model may not be scalable to the entire country but its success offers a vital policy instrument in areas where it is feasible and desirable (such as where existing private schools have the capacity and the students from public schools have the ability to attend such schools).

Finally, any large education system risks failing to achieve its objectives if it lacks clearly stated standards for compliance and monitoring. One task for reform is to create a new, clearly defined set of standards to ensure that everyone working in the education system (planners, administrators, teachers, and support personnel) understands the goals of the system as a whole and their individual responsibilities in reaching those goals. Standards, in turn, require accountability. Well-thought-out mechanisms to encourage, and ultimately ensure, that all actors carry out their expected roles will need to be agreed upon and implemented. Creating and strengthening bureaucratic mechanisms for enforcing accountability are important, but so is strengthening the demand side of accountability. Emerging evidence indicates that disseminating timely information about schools’ performance to parents has the potential to produce better outcomes.\textsuperscript{24} Such possibilities should be seriously considered.

\textbf{Fiscal resources}

Fiscal resources are a perennial problem and will remain so for the foreseeable future. The past few years have seen Pakistan’s economy average a 3-4% growth rate\textsuperscript{25} and double-digit inflation. As a result, for the first time in its history, Pakistan’s per capita income has dipped below that of India. For the last few years, national budgets have routinely managed deficits of around $8-10 billion, which have been financed by borrowing or other foreign inflows.

The situation today is no different. In this environment, a significant expansion of the fiscal space for education will require a major sustained push, particularly as the resources needed for investment in large-scale energy projects are likely to take precedence. Still, it can be done, and what is more important is that existing resources can be used to create better performance in the education system. A better use of resources will also provide the impetus to mobilize more resources, as there are strong voices in Pakistan that highlight the ineffectiveness of simply pouring money into a dilapidated education system.\textsuperscript{26}

A better use of resources will require rethinking the private-public-civil society partnership in schooling as well as in higher education. Emerging evidence indicates that private schools have better outcomes, in spite of their teachers sometimes having less formal teaching education than public school teachers, and being lower paid. However, their absentee rates are lower, and in \textit{A Dime a Day: The Possibilities}\textsuperscript{27}.

\textsuperscript{23} World Bank October 2012 “Pakistan: can low-cost private schools improve learning?” From Evidence to Policy, \url{http://siteresources.worldbank.org/INTHDOFFICE/Resources/E2P_Pakistan.pdf}.
\textsuperscript{25} The growth rate of income per capita is considerably less, since population growth is about 1.5% per year.
and Limits of Private Schooling in Pakistan, Andrabi, Das, and Khwaja find evidence that “increased effort” in private schools “may indeed overcome the problems of poor educational qualifications and training”. Sir Michael Barber’s report “The Good News from Pakistan” also suggests that private schools are generally less expensive on a per-student basis. Thus, channelling some public funds into these schools via targeted scholarships may offer economically disadvantaged families an opportunity to pursue a higher quality education at a lower cost to the public exchequer.23

Still, the use of such partnerships will need to be judicious. Private schools are not a panacea, as evidence shows they mainly crop up in areas where there are public schools already. This implies that they reduce the public schools’ share of enrolment but do not necessarily increase total enrolment. More importantly, they are unlikely to create options in areas where girls or poor children lack access to school or have to travel far. This is an area where government cannot abdicate responsibility. Further, private schools have their own share of performance issues stemming from accountability.23

Other, targeted uses of resources should also be considered to meet ends such as increased enrolment. For poor families who may not have the wherewithal to send their children to schools, demand-side subsidies may be an important instrument. For example, if Pakistan subsidizes school lunches, it could promote both better nutrition and higher rates of school attendance. And if mothers of the students actually do the cooking, it could create the collateral benefit of boosting local employment, while ensuring the quality of the lunches. Similarly, a requirement that students wear school uniforms can carry both educational benefits and spillover advantages – if, for example, local people make the uniforms and by virtue of that extra income gain extra economic stability. Programs such as these can have promising outcomes, but in some settings have also led to undesirable consequences by increasing opportunities for corruption.

Human resources
Development and retention of human resources are of course central to any reform effort. The former requires institutions and mechanisms of training, and the latter requires appropriate incentives to hire and retain quality teachers. Both will require significant choices to be made. For instance, a reform plan will need to consider development of teacher training institutes (and perhaps a graduate school of education). The setup of these institutes is itself a major development effort, at least at the scale Pakistan requires.

Revisiting the incentive structure for teachers will be an essential albeit complicated process. One aspect of incentives reform will be to rationalize the pay scales and perks of teachers with those of other civil servants. This will require a significant increase in recurring expenditures, and will thus need to have the long-term backing of all political actors. The other aspects of incentives are linking pay with performance, a usually volatile issue, and the ability to hire and fire teachers, currently virtually impossible in public schools.

Good systems can often also be run down by regressive bureaucracy personnel. To set good governance on a long-term track, much of the educational bureaucracy will also need to be retrained to come up to speed with global trends and standards.
**Curriculum**
Curriculum in Pakistani schools has long been a focus of criticism and has been blamed for engendering intolerance and rigidity. But efforts at reforming curriculum have often faced resistance when changes have been proposed to Islamic studies, history (particularly Pakistan Studies), Urdu, or literature. It is not clear if there is an organized lobby for resistance, but it is clear that most often, politicians have backed off for fear of negative publicity. These controversies erupt every few years. The most recent one was April 2013 when the Punjab government beat a hasty retreat when its new Urdu textbook was accused of being anti-Islam and anti-Pakistan.27

Part of the concern with curriculum is its content, and part with the manner in which it is delivered. Like many other countries, Pakistan needs to move away from rote learning and toward an education system that stimulates students’ abilities to think, challenge, and be creative. In studying science, for example, students need to be encouraged to apply logic and math to real-world phenomena. One way to counter rote learning is to link testing to curriculum rather than to specific textbooks. The other is to improve the quality of teachers. In addition, curricula need to expand so that they cover financial and health literacy and entrepreneurship. This cannot be done without competent teachers – another argument for why reform needs to be systemic rather than piecemeal.

**Initiating reform: political and institutional challenges**
The first challenge in educational reform is to get serious system-level reform – rather than piecemeal or cosmetic initiatives – firmly on the government agenda and to get it endorsed with visible resolve. This is likely to be difficult because the new government takes charge at a time of other highly emotive and visible problems such as the economy, energy, and security. The economy has seen double-digit inflation in the last three years, and growth has been meagre in comparison with South Asian neighbors; energy riots are increasing; and growing sectarian violence and other security incidents are constantly in the news. Taken together, they distract the focus from long-term development as political parties instinctively understand that the return (in terms of votes) from investing in these problems is likely to be greater than investing in education. Visible resolve is also important. Even though Article 25(A) enshrines basic education as a fundamental right, and even though education was an election issue and the political parties were responsive in their manifestos, the long history of failed education reform in Pakistan should make reformers cautious in interpreting political declarations.

At the same time, reformers should also recognize the opportunity at hand for getting education reform onto the public agenda. Theories of agenda-setting suggest that problems are most likely to get onto the public agenda when three streams combine:28 (i) a problem stream (a long-standing and well-recognized problem), (ii) a political stream (a fortuitous political change that opens the doorway for that problem to get onto the agenda), and (iii) a policy stream (when a base of potential policy solutions is available, perhaps through previous work or through the availability of think tanks and consultants). The beginning of this chapter discussed how two of these, the problem stream and the political stream, are already

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aligned in Pakistan – as the problem of education is of emergency proportions, and the new political leadership is more aware, and probably looking to cement its political mandate by delivering services that can translate into votes in the next election. There is also a growing body of evidence about efficacy of delivery in education from NGOs following best practice solutions. What remains is to effectively build momentum for educational change and create credible policy proposals that incentivize the political leadership to act. The most likely source for this activism is civil society, policy entrepreneurs such as members of think tanks and advocacy organizations, or political leaders who are delivery-conscious.

The second challenge in initiating reform is the institutional impasse created by the recent constitutional changes that have affected education. This impasse has left the government bureaucracy uncertain about who is responsible and has authority and accountability for different sectors of education. Resolving this uncertainty is crucial because actors will be reluctant to stake personal and political capital as long as it is unclear who can take credit from achievements in reform. Thus it will be extremely challenging to mobilize communities of reform and to build and maintain their momentum over a 5- to 10-year effort, a period of time which is likely to be required for reform. And it is unclear if the federal government can force all of the provinces to focus equally on education and to maintain a uniform push towards reform. But even after this impasse is resolved, the ease and difficulty of initiating education reform will vary greatly across Pakistan’s four provinces (see Box 2).

### Box 2: How reform might unfold in Pakistan’s provinces

Initiating reform will be very different in the four provinces. For instance, in addition to having the most resources, Punjab’s government has the most well-established political mandate post-election (an outright two-thirds majority) and a continuity of leadership from the last government and is thus likely to have the easiest time in reform. By contrast, Balochistan, which has faced an almost full-blown insurgency and devastating sectarian attacks in the last few years, will find it much more difficult to focus on reform. Similarly, Khyber Pakhtunkhwa, the frontline province in the Afghan war, the site of a steady stream of attacks on girls’ education (even if in limited districts), and led by a coalition government with conservative partners, may find educational reforms a difficult proposition. Sindh is being governed by the party that held the federal government for the last five years, and it is not clear what agenda it will pursue provincially after its recent electoral loss (i.e., whether it will refocus on or retrench its policies on service delivery).

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### Sustaining reform: implementation challenges

The grand challenge of educational reform in Pakistan will be implementation. The problem in Pakistan’s educational system is not what needs to be done, but who will do it and how they will achieve their aims. As Sir Michael Barber points out in a recent report, everyone he spoke with in Pakistan before initiating a reform project for education agreed that the problem was implementation. Pakistan has had a long history of reports and plans, but appears to lack both the capacity and the serious intent to

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29 Special Representative on Education for Pakistan, for United Kingdom’s Department for International Development.

30 Barber, Michael, 2013. “The good news from Pakistan”. [http://www.reform.co.uk/content/20419/research/education/the_good_news_from_pakistan](http://www.reform.co.uk/content/20419/research/education/the_good_news_from_pakistan)
implement reforms. Even if there is intent, this lack of implementation capacity will be a major challenge to be addressed before and during any reform effort.

That is not to say it cannot be done, but it requires a certain political and personal resolve on the part of the political leaders, the bureaucracy, and civil society. Barber’s *The Punjab School Reform Roadmap*, a project of the United Kingdom’s Department for International Development, is an emerging example (see Box 3).

**Box 3: The Punjab School Reforms Roadmap**

Since its initiation in 2010, the Punjab School Reforms Roadmap has pushed for greater efficiency in urban schools and has led to the creation of Punjab’s Programming Monitoring and Implementation Unit (PMIU), a multi-purpose institution that accomplishes everything from data collection to teacher training. In addition, the Roadmap has funded and expanded the Punjab Education Foundation, which gives vouchers to poor students to enable them to attend private schools at no cost. It has also funded the creation of private schools where government education is lacking, and “bought out” all the slots in some low-cost private schools so that the school is free for local students. In addition, it has attempted to tackle the political nature of educational job appointments and to increase merit-based appointments and promotions of both government teachers and the local district-level officers who oversee education.

The government of Punjab has supported the Roadmap by creating a Punjab Education Sector Reform Programme under the Department of Education, which oversees the PMIU. Through this unit, the government has brought new textbooks into its schools, recruited new teachers, collected data on the effectiveness of the Roadmap, and provided stipends for female students to help close the education gender gap.

Although there are questions about the success of the Roadmap that cannot be answered yet, particularly about the success it has claimed in increasing enrolment, it contains important lessons. The Roadmap has certainly been able to mobilize material and political resources, and it has rapidly scaled up. In that sense, it is an important example of the manner in which provincial governments and private education providers throughout Pakistan could move forward quickly to improve access to high-quality school education.

Implementation of education reform will also require great political skill, not just political will. Policy change and its implementation is driven at all stages by complex political interactions, but overwhelmingly, policy literature focuses on the opaque notion of political will to explain why reform stalls. This notion is problematic for students and activists seeking to implement change.\(^\text{31}\) It suggests that the main challenge for reformers is to find an appropriately powerful political leader or a small group and just convince them to want reform. They can then exert their “will” to make it happen. If reform fails, then the leader or group did not have sufficient “will”. The rest of reform is viewed more as a technical matter: designing the right curriculum, agreeing on the right policies, and then political “will” can just make things happen.

The problem is that this is not the way reform works. What is technically feasible is often infeasible in practice even if top-level political leaders desire it. Interventions often have side-effects and raise unforeseen opposition. Well-intentioned reformers will need to recognize different types of political skills needed to manage the reform process, which will help them interpret the reactions their actions may generate, and thus help them adapt their strategies. This will require: astute political analysis (assessing the intentions and potential actions of stakeholders), defining political strategies (an analysis of the effects of proposed interventions on the players, their power, their positions in response to the intervention, and the resulting public perception), executing these strategies, and adapting to unexpected responses.

While these implementation and political skills are important for providers of education, they are only one arm of a strong mechanism for sustaining reform. The other arm is the demand side. As Shantayanan Devarajan of the World Bank notes, there are other important elements to maximizing the chance that reforms work. One of these is to empower the clients of the education system, the children and their families who stand to directly benefit from a quality education. Emerging evidence indicates that where the parents participate actively in their children’s education, educational outcomes improve. Devarajan reminds us that while it is difficult for government agencies to monitor teacher attendance and quality of instruction in rural areas, the student in the classroom and the parents who watch over them can. Another important consequence of increasing “client power” (as phrased in the 2004 World Development Report) is that parents and civil society can organize and lobby to break that destructive nexus between politicians and public institutions that creates dysfunction, where politicians compromise the educational system for personal or party benefit (whether through teacher appointments for political reasons, or creation of ghost schools or other mechanisms). Thus while altering provider behaviour is important, increasing “client power” can contribute significantly to ensuring reforms are sustained.

Seizing an opportunity for system-wide change
While the state of the educational system in Pakistan is dire, and the gap between education providers and the aspirations of the people huge, we believe that a window of opportunity is now open for initiating system-level reform. It is urgent to seize this opportunity, because population dynamics will make education a graver problem in the next decade if immediate steps are not taken. It is also important to recognize that reform must tackle all sectors of the education system—primary/secondary, higher education and vocational education—as Pakistan does not have the luxury to delay reform in one sector until the other sectors improve. Of course, reforming the system poses a great challenge, but strong examples of success within Pakistan remind us that it can be done. This may be the time for public, private, and philanthropic institutions and change-makers to pool their resources

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and initiate lasting system-wide change, which some of them have achieved, at least partially, in their respective domains.

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