Thematic Paper: Comprehensive Education

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I. Background

Education provides many undeniable benefits: it enables people to become healthier, secure better jobs and earn more, have greater voice in society, and engage in civic life. Education also has an intrinsic value, as learning is something that many people enjoy and can provide a richer perspective on life. These benefits transmit across generations and communities at large. In the area of population and development, higher levels of education are associated with smaller family sizes and thereby lower levels of poverty, lower risks of malnutrition and illnesses, and an increased ability of parents to provide their children with opportunities. For girls and women, education can be especially beneficial, with one additional year of schooling possibly increasing wages by ten percent (Psacharopoulos and Patrinos 2004), reducing infant mortality rates by five percent (Schultz 1993), and translating into the woman’s children remaining in school for an additional one-third to one-half year (Filmer 2000).

But for education to provide these benefits, it must be comprehensive enough (a concept defined below) to equip youth with the knowledge, skills, and competencies required for success in the workplace and in other areas of their life. Consider the issue of youth employment, which is among the most pressing today. Our world is now home to more than 7 billion people—an increase of 1.4 billion people since the first International Conference on Population and Development (ICPD) in 1994. Of these, nearly 3 billion are youth below the age of 25 years, and 90 percent of them live in the developing world. The skills of this generation will shape the economic prospects and development outcomes of the countries—and regions—in which they live. Take South Asia as an example. Over the next two decades, South Asia alone will need to create 1.2 million new jobs each month in order to accommodate new entrants into the labor force (World Bank 2012a). The challenges presented by such a fast-growing population are major, and education will have to play a key role in ensuring that countries manage a successful demographic transition and benefit from the so-called demographic dividend. The fact that more working adults within households could help reduce poverty substantially—so long as new workers are equipped with in-demand skills and able to find jobs.

Today, however, the quality of the education received by many youth is low and youth have suffered disproportionately compared to other groups during the recent global economic downturn. Millions have been left without jobs and millions more with reduced incomes. And beyond the current crisis, dramatic changes are taking place in labor markets that have profound implications for the type of education that youth will need. Globalization and new technologies are changing the landscape of the job market, rendering many jobs obsolete and creating openings for jobs that have not yet been invented. Robust and flexible skills will be required for youth to be competitive workers. In today’s global village, less developed countries face serious challenges in adjusting their education and learning systems to respond to changing demands for human resources and to more effectively compete in the global economy (World Bank 2012b).
Beyond its importance for getting a good job, education also matters in many other areas in life. For example, early-childhood investments have been shown to reduce antisocial behaviors, thereby reducing the likelihood of arrests and imprisonment later on in life (Heckman et al. 2010). In addition, focusing on non-cognitive skill development has not only been shown to improve academic achievement at the lower-secondary level (Martin 2010) but also to improve the social-emotional development of students and positively influence the choices they make with respect to civic participation and health (Farrington et al. 2012). Indeed, Heckman et al. (2012) suggest that personality traits developed in school are important predictors of meaningful life outcomes that go beyond educational attainment and employment. The fact that these personality traits are often missed in traditional measures of learning such as standardized tests and other learning surveys does not mean that they do not matter.

The term “comprehensive education” usually refers to the fact that what is taught in schools should be sufficiently broad—including, for example, topics such as civic participation and sexual and reproductive health. In the context of this paper, we prefer to discuss it according to a simple two-by-two typology (table 1). On the vertical axis of the table, a distinction is made between attainment (how many years of schooling children complete) and achievement (how much learning takes place, as measured, for example, through standardized test scores). On the horizontal axis, a distinction is made between comprehensiveness in terms of who is being taught (is the education system comprehensive enough to reach all youths?) and what is being taught or learned (apart from academic topics, are job skills and life skills also being learned?). This last question about what is being taught matters because it is now well accepted that essential learning is not only about academics or the “3 Rs” (reading, writing, and arithmetic), but also “soft” skills (such as critical thinking, the ability to work in teams, and problem-solving)—not to mention other life skills that make it possible for youth to succeed in all aspects of their adult lives. Comprehensive curricula must therefore go well beyond the 3 Rs.

| Table 1: A Simple Typology of Potential Meanings for Comprehensive Education |
|---------------------------------|-----------------|
| **Who?** (Gender, wealth, and other gaps) | **What?** (Academic, job, and life skills) |
| Attainment (schooling) | Are all children in school? | Are all types of skills taught? |
| Achievement (learning) | Are all students learning? | Are all types of skills learned? |

Source: Authors.

In this simple typology, education systems may be considered not comprehensive enough if some segments of the population are not reached or served—this includes, for example, marginalized groups in terms of their gender, wealth, or other characteristics such as disability. The failure in reaching such marginalized groups may be observed in the area of attainment and schooling (who is enrolled and attends education programs, and who does not), or in terms of achievement and learning (who is actually acquiring knowledge and skills, and who is not). In addition, education systems may not be comprehensive enough if some of the necessary knowledge, skills, and competencies are not being taught. This has implications for achievement and learning, since students are not likely to learn what is not taught. It must be noted that this also has implications for attainment and schooling, since interest in pursuing an education may be weakened if what is taught is not relevant or useful—whether this relevance is measured in terms of academic knowledge, job skills, or life skills. While it is not feasible in a short thematic
paper such as this one to review the extensive literature on these many topics and what the literature suggests for policy, we will try to provide at least some pointers in the rest of the paper.

II. Agreements and Objectives

Before discussing progress to-date towards comprehensive education as well as some of the lessons learned from past experience, it is useful to provide context in terms of the international framework within which these discussions are taking place. Providing access to a high-quality basic education is a right enshrined in the Universal Declaration of Human Rights and the United Nations Convention on the Rights of the Child. Moreover, it is a strategic development investment. Over the past quarter century, the global community has recognized the key role that education has to play in eradicating poverty, spurring development, and improving the lives of people around the world. In 1990, government officials and officials and staff of multilateral development agencies as well as bilateral aid agencies met in Jomtien, Thailand, to affirm the importance of education in development. Together, they declared Education for All as a goal. And in the early years of the 21st century, the Millennium Development Goals (MDGs) campaign once again brought education to the forefront of the global development agenda by focusing on education in two out of its eight goals—namely, achieving universal primary education and achieving gender equality in education by 2015.

The 1994 ICPD came at the halfway point between these two milestones of the global push for better education. The ICPD recognized the fundamental relationship between population, sustained economic growth, sustainable development, and advances in the education, economic status, and empowerment of women and youth. Its Programme of Action (PoA) articulated and adopted a 20-year vision that aimed to more fully and effectively link education, economic status, and empowerment in the 21st century. The PoA recognizes that widespread poverty, the major challenge to development efforts, is often accompanied by illiteracy, unemployment, low status of women, and limited access to social services—including education. It specifically notes that the world community has a special responsibility to ensure that all children receive an education of improved quality and that they complete primary school (11.1). But it also recognizes the need to go beyond primary school, emphasizing that education and training must adequately prepare youth—and especially girls—with the skills needed to compete in today’s increasingly complex world (11.3-11.4).

To combat poverty, the PoA recommends increasing access to education, skills development, and employment opportunities. A cross-cutting theme across each of these three objectives is eliminating persistent inequalities and barriers to girls in school and the workforce. For instance, it calls for the creation of programs that encourage girls to stay in school, as well as for gender-sensitive training and curriculums (11.8). But above all, it spells out the impact on development of an increasingly large global youth population—surely a powerful force, if properly harnessed (this relates to the concept of a demographic dividend mentioned earlier). While major gains have been achieved in many areas, much remains to be accomplished.

Today, the international community remains firmly committed to meeting the education MDGs. But it also recognizes the need to set an agenda that goes beyond the MDGs’ target date of 2015. An important recent development in this context is the Global Initiative on Education (Education First), launched by the UN Secretary-General Ban Ki-moon on 26 September 2012 during the UN General Assembly. The goal of this initiative is to strengthen global efforts to achieve quality, relevant, and inclusive education for all, and to ensure that education assumes a
central role within social, political, and development agendas. It also seeks to promote education that tackles the many challenges of the 21st century and inspire students to become active global citizens. This new initiative reinvigorates the global movement for education—both up to 2015 and beyond, and it clearly points in the direction of a more comprehensive education framework.

One last point needs to be made related to existing agreements and objectives. People are learning in many different ways, including after the completion of formal schooling. Recognizing this, definitions of education often differentiate between formal education and informal education. But in addition, non-formal education includes organized educational activities outside the established formal system that is intended to serve an identifiable learning clientele with identifiable learning objectives. Unfortunately, learning that occurs outside the formal education system is poorly understood, often not made visible, and, consequently, not appropriately valued. Non-formal education makes a significant contribution to the personal and social development of individuals, and especially girls and young women who need such forms of learning to access information and skills on complex topics that affect their life on a daily basis. In the United Nations’ World Programme of Action for Youth (WPAY), non-formal education is recognized as an effective conduit to delivering skills for work, health, education, and general empowerment (A.21, A.25). Even if we will not talk much about non-formal learning in this paper due to lack of space to do so, it is important to recognize its importance.

III. Progress

III.1. Schooling and Attainment

How much progress has been made in education? How much remains to be done? In the last two decades, remarkable progress has been made in terms of improving education attainment, including with respect to the goals set forth by the ICPD PoA—namely ensuring universal primary education and eliminating persistent gender inequalities in education. Driven by the MDGs campaign as well as national and international efforts, most of the world’s children are now enrolled in and completing primary school and girls have benefited the most from these gains. The number of out-of-school girls in primary school has been cut nearly in half since 1999, and two-thirds of developing countries have reached gender parity in primary education. In over one-third of these countries, girls outnumber boys in secondary education.

At the same time, according to data from the World Bank’s EdStats education data website, 61 million children remain out of school today, half in sub-Saharan Africa and a fifth in South Asia. Many of these children may be missing out on their chance for an education simply because of where, to whom, and what gender they were born (UNESCO 2010). Armed conflict compounds these multiple sources of disadvantage, and states suffering (or emerging) from pervasive armed conflict have been found to have some of the world’s worst indicators for education (UNESCO 2011). In South Sudan alone, one million children remain out of school—even as enrollment in primary school increased by 700,000 between 2005 and 2009 (World Bank 2012c). Moreover, while students may be entering school, they are not always completing their cycle. African countries in particular suffer from some of the lowest primary completion rates in the world: two thirds of sub-Saharan African countries have primary completion rates of less than 80 percent. Other countries with higher primary completion rates but large out-of-school youth populations in absolute numbers also warrant attention. In addition, gender disparities persist, especially beyond primary education. As one example, Nguyen and Wodon
(forthcoming) rely on the latest Demographic and Health Survey available for Ghana. They find that only 40 percent of boys complete senior secondary school, but the proportion for girls is even lower at about 30 percent. The analysis clearly shows that one of the main contributors to the gender gap in attainment at the end of secondary school is the lack of transition from junior to senior high school among girls. This is also observed in other countries.

### III.2. Learning and Achievement

While progress has been made towards better education attainment, countries continue to struggle to improve achievement. Today, youth in developing countries are spending more time in school than ever before. Yet, learning levels in many countries are alarmingly low, which suggests that time in school is not always well spent. In Mali, more than 30 percent of youths who had completed six years of schooling could not read a simple sentence, and in Kenya, the same was true for 50 percent of youth. In Peru, only about 50 percent of children in grade 2 could read at all (Crouch 2006). Numeracy skills are also low: in Pakistan, tests of Grade 3 students show that only half could answer very basic multiplication questions (World Bank 2011a), while in Mozambique, 74 percent of students in grade 6 did not possess basic numeracy skills (King and Reinikka 2012). International student assessments at the junior secondary school level such as PISA (Program for International Student Assessment) and TIMSS (Trends in International Mathematics and Science Study) take this one step further, suggesting that even middle-income countries with high enrollment rates in basic education, such as Colombia, Indonesia, and Thailand, fare poorly in terms of basic mathematics competencies (World Bank 2011a). Moreover, disparities in achievement exist even within countries, with learning levels often especially low among hard-to-reach and disadvantaged groups. It is clear that students around the world, whether they live in developing or middle-income countries, are facing serious achievement challenges.

Low achievement has many implications, but as noted by Jimenez at al. (2012), one of the most devastating is for employment prospects. A diploma certainly serves an important purpose in expanding opportunities for employment, yet ultimately it is the knowledge, skills, and competencies that a person possesses that will determine his or her productivity and ability to adapt to a dynamic labor market. Unfortunately, educational curricula do not always align with the demands of the labor market. But beyond the role played by a weak demand for labor in many countries, persistently high levels of unemployment among youth reveal the failure of education systems to equip young people with basic skills. Even those who do manage to get an adequate basic education may be unable to find work because they do not possess the skills needed by today’s—and, more importantly, tomorrow’s—employers. In India, for instance, because many university and college graduates are poorly trained, firms in the software, banking, pharmaceuticals, and retail sectors are increasingly designing their own training programs—and even building their own campuses to train future recruits (Wadhwa et al. 2008). Yet, if workers do not possess the basic skills that are demanded—the 3 Rs as well as “soft” skills—training programs within firms may provide only limited benefits. More importantly, they will likely favor only those who are better off. In many countries, low enrollments in fields as science, technology, engineering, and mathematics are further exacerbating these problems, especially for women (World Bank 2011b).

Another issue is the fact that many education systems remain somewhat narrow in what is being taught, and thereby learned, by youth. For example, issues related to sexual and
reproductive health are serious in many countries, and especially in Africa. In this region, the HIV-AIDS pandemic remains a major threat and fertility rates continue to be very high, with many women delivering five or more children during their lifetime. Comprehensive education has much to contribute in providing better information on these challenges and in helping to change behaviors when needed. We noted earlier that educating girls and women could lower maternal mortality rates by at least five percent, but additional gains are likely to be obtained if basic health education were to be systematically added to curricula. Sexual education in K-12 schools is now routinely provided in developed countries (in the United States, see for example National Guidelines Task Force, 2004), but this is not yet the case—at or at least not to the same extent—in many developing countries.

III.3. Barriers to Better Education

Why is progress so hard to achieve? What are some of the main barriers to better education performance? At least three barriers should be mentioned. First, cost remains an issue. Education is not free, as it involves both out-of-pocket costs and opportunity costs for households. Household surveys find that parents, when questioned about the reasons for nonsatisfaction with their child’s education, routinely emphasize costs. This is even more the case when parents are asked to explain why their children have dropped out of school or have never enrolled (Wodon 2012, Tsimpo and Wodon 2012). And while many developing countries have adopted a free registration policy at the public primary school level (and in some cases at the junior high level), costs remain burdensome for education levels beyond that. In the absence of effective student grant and loan programs, young people are often left to finance their post-junior high school education and training with their own resources. Even when senior high schools and universities are heavily subsidized, the opportunity cost of the time spent in school by youth may be large. The role of both out-of-pocket and opportunity costs in driving youth away from schools is probably the main reason why conditional cash transfer programs have been so successful and popular in recent years (Fiszbein et al. 2009).

Second, part of the reason why education is costly for households comes from the fact that public budgets are limited, so that out-of-pocket costs are required for cost recovery. But this does not mean that simply increasing public funding for education will be a guarantee for success, especially for improving learning. The literature on so-called education production functions—which relates learning performance to school inputs—suggests that more inputs do not necessarily lead to better outcomes. One of the first studies in this field—the Coleman Report in the United States (Coleman et al. 1966)—showed that family background and peers had larger impacts on achievement than school inputs, and these are difficult variables to affect through policy. Over the last three decades, Hanushek (1986, 2010; see also Hanushek and Woessmann 2011) has been a major proponent of the position that education provision is often inefficient and that many school inputs make only a small difference in achievement. Recognizing that teacher quality matters, he nevertheless suggests that teacher quality is often not related to pay or formal qualifications. In developing countries, the marginal productivity of inputs related to teachers has long been shown to be low as compared to that of other inputs (Pritchett and Filmer 1999). Recently, Glewwe et al. (2011) found that, while a few basic inputs have significant effects (including availability of desks, teacher knowledge of the subjects they teach, and teacher absence), much of what is spent on education may not matter as much as people believe. Of course, this does not mean that school inputs do not make any difference. Card and Krueger
(1996) as well as Greenwald et al. (1996) find that school resources tend to be positively associated with educational attainment, achievement, and earnings (see also Baker 2012). However, investments must be made carefully as impacts differ greatly between various options, and simply spending more is not a solution.

Consider second-chance programs for youth who either never enrolled in or dropped out of school. Some of these programs, such as literacy courses, equivalency degree programs, and vocational courses, can make a major difference for their beneficiaries. One survey for sub-Saharan Africa identified 154 such programs in 39 countries serving 3.5 million children in 2006. This may sound encouraging, but it remains small in comparison to the 52 million African youths who were out of school in 2009 (DeStefano et al. 2006). Furthermore, some second-chance programs have not been successful (there is a lot of heterogeneity in the quality of these programs) and, as is the case with other programs that benefit disadvantaged populations, they often suffer from limited political and financial support. In order to be successful, these programs must establish stronger links both back to the formal education system and forward to jobs (Jimenez et al. 2012).

Third, apart from cost barriers to education and the fact that many school inputs or programs do not seem to make a large difference in achievement as well as attainment, cultural factors also play a role in limiting education opportunities, especially for girls. One case in point is that of child marriage (Brown 2012), which is related not only to economic factors, but also to cultural or religious practices. Using data from 60 Demographic and Health Surveys, Nguyen and Wodon (2012a) show that almost half of women born between 1985 and 1989 married before the age of 18 in South Asia. The proportion was 38.5 percent in sub-Saharan Africa and 31.5 percent in the Middle East and North Africa. Child marriage has been decreasing over time, but only slowly, and recent studies have suggested that marrying early reduces substantially the likelihood that girls will be literate and that they will complete secondary school (Field and Ambrus 2009, Nguyen and Wodon 2012b). As a result of cultural factors such as child marriage, girls thus suffer in terms of both educational attainment and achievement.

What can be done to deal with issues such as child marriage? As noted by Nguyen and Wodon (2012c), laws can be adopted to prevent marriage below 18 years of age, but they are often not enforced. Thus, while needed, such laws are not enough. There are, however, a number of promising interventions, such as the use of conditional cash transfer programs previously mentioned. Other education interventions, such as improving school proximity (especially for secondary schools), providing public transportation to go to schools, ensuring access to water in schools, and, perhaps most importantly, enhancing the quality of schooling so that the incentives for girls to enroll are higher, may also have beneficial, though indirect, effects on child marriage. Still another alternative is to provide transfers conditional on not getting married, as was done in rural Ethiopia with the Berhane Hewan pilot program, through which a pregnant ewe is presented to the girl and her family at graduation (Erulkar and Muthengi 2009). But it is also important to emphasize that reframing the transition of girls to marriage requires a policy dialogue with religious and community leaders who have a great deal of influence on those issues. The example of child marriage is just one of the areas where cultural and religious practices play a role in affecting education outcomes. But it illustrates well the necessity of entering into a dialogue with community and religious leaders about such practices, as well as about what is being taught in school—including in the area of sexual and reproductive health.
IV. Key Takeaways

IV.1. Invest Early, Smartly, and for All

What should be done to improve education attainment and achievement? While there is no single solution, there seems to be a growing consensus around the need to invest early, smartly, and for all (World Bank 2011a). Investing early means that we must enable children to get off to a good start through early childhood development (ECD) programs—including in nutrition, stimulation, and basic cognitive skills. We also must invest smartly to help students learn while they are in school through strong education systems with clear learning standards, good teachers, adequate resources, and a proper regulatory environment. Finally, we must invest for all in order to better reach disadvantaged groups, including girls.

What does this mean in practice? A clear priority is to develop better curricula to help students acquire job-relevant skills that employers demand. Countries should orient their education systems more directly on closing skills gaps, responding to labor market signals, and promoting knowledge-based capabilities in order to ease the school-to-work transition (Wang 2012). Pre-employment and on-the-job training—including classroom instruction, apprenticeship arrangements, or internships—can also help, as can second-chance and non-formal learning opportunities (Jimenez et al. 2012). Surveys such as the Skills toward Employment and Productivity (STEP) measurement survey can help shed light on existing skills gaps and mismatches, covering cognitive and technical skills as well as behavioral and social skills (Banerji et al. 2010).

The importance of preparing students for the job market should not be underestimated. As the recent economic crisis has highlighted, young people are among the most vulnerable to unemployment or underemployment. And while a good job is often needed to avoid poverty, it can also foster feelings of empowerment and even happiness (World Bank 2012b). Beyond being vital for livelihood, employment is instrumental in reconnecting youth with society, in enabling them to participate and be recognized, and in building trust in institutions. And it is fundamental for allowing young people to develop their leadership potential and to believe in themselves. A recent impact evaluation of a World Bank project in Liberia on the school-to-work transition of adolescent girls supports these claims. The study found that this second chance project generated gains not only in employment and earnings, but also in how the girls felt about themselves and their ability to work and interact with others, including people they did not know, and feel in control of their life and more outgoing (Lundberg et al. 2012).

Creating an environment within education systems that promotes investments in innovation and creativity can promote such feelings of empowerment. Though it has yet to be evaluated, a program in El Salvador is empowering women through training modules that enhance beneficiaries’ basic technical skills, including innovative “life skills” training that aims to increase their employability over the medium term. Whereas some seek training primarily related to textile production and computer skills, many others focus their training on less traditional skills, including those that often benefit self-employment such as baking, cooking, and cosmetics (World Bank 2011b). Investments such as this are not only likely to be beneficial for participants’ employment opportunities, but also likely to help confront social norms and discrimination that often marginalize certain groups within society.
IV.2. Invest in Comprehensive Education

Beyond providing students with skills for the job market, investments in comprehensive education for broadly defined life skills are also required. As the previous example suggests, equipping women with life skills can be connected to employability, but, importantly, also to empowerment and equality. Two additional examples of why life skills are wise investments are given below, one about practical skills related to health that can and should be learned in school, and the other about the role of character and values in education. Consider first practical skills that can be learned in school. In a recent study of girls’ education in Burkina Faso, parents were asked to list what they believed were the main advantages of education for girls. Beyond the personal development of the child and academic achievement—which helps the girl as well as her families in simple tasks such as reading a letter or sending/receiving texts messages—parents also mentioned improved practical skills related especially to health and hygiene, as well as good behavior. Girls who attend school were seen as having a better understanding of nutrition and the prevention of disease, among others. Also, in addition to the list of more traditional academic subjects, “life skills” was chosen as an important topic by respondents. Thus, while such topics were emphasized as a top priority only by a minority of respondents, they were valued (Gemignani and Wodon 2012).

Consider next character and values. Limited evidence is available on character education in developing countries, but research in the United States suggests that such programs may help in preventing social problems among youth (Battistich, undated). In the Burkina Faso study cited above, as well as in developing countries more generally, values are high on the agenda of many parents. For example, satisfaction among parents with the education received by their children is often higher with faith-inspired schools than with public and private secular schools, and this is in part due to the fact that faith-inspired schools place a higher emphasis on values. For parents who choose to send their children to Islamic schools, the in-depth religious education provided in the schools is often the main factor in the decision to send their children to such schools. For parents sending their children to Christian schools, the importance placed on values (as opposed to religion more narrowly) is often the second most important reason after academic excellence for sending their children to the schools (Wodon 2012, Tsimpo and Wodon 2012; see also Para-Osorio and Wodon 2011).

V. Moving Forward

Various strategies can be followed by countries to improve both education attainment and achievement, but initiatives that take a systemic view of learning centered on measurable results are among the most promising (World Bank 2011a). In this concluding section, following Jimenez et al. (2012), we mention a few priority areas of focus to broaden the opportunities for youth to remain in school and to improve the quality of the education they receive, as well as to help those who dropped out get back on track. The basic idea is that countries must invest in making education more attractive to youth and develop cost-effective programs to do so.

Jimenez et al. (2012) suggest first to take a comprehensive approach to education reform. Learning takes place throughout life. Therefore reforms must cover all levels of education, from early childhood and primary education to post-primary education and beyond. Reforms must also engage all stakeholders in the education system. After all, governments are not the only—or the best—providers of education services (Barrera-Osorio et al. 2009; Tsimpo and Wodon 2012). In
other words, reforms must lead to a more coordinated and flexible network of public and private providers, as well as formal and informal programs. Moreover, it is important to ensure that youth are able to make effective use of the knowledge, skills, and competencies that they gain in the classroom by establishing clear linkages from the education system to the labor market. By focusing on the education system as a whole rather than each individual part, reforms can better respond to the challenges youth around the world face today.

Second, we need to accept that increasing inputs alone will not lead to better outcomes. Inputs such as school buildings, textbooks, and trained teachers and professors, are needed and can be strategic investments, but they need to be used effectively in order to improve learning. Schools and teachers need to be held accountable for results, with learning being measured and monitored on a regular basis, especially to improve learning outcomes for all students, and not just the smartest or most privileged.

Third, we need to better inform students so that they can make good decisions related to their education. Simply providing young people with information on the benefits of education can significantly extend their time in school. For example, in the Dominican Republic, eighth-graders who were shown data on earnings among high school graduates were more likely to enroll in secondary education than those who did not receive this information (Jensen 2010). In addition, second-chance and informal education opportunities need to be expanded to help those who dropped out of school get back on track.

Fourth, we need to evaluate the impact of innovative programs to gain a clear understanding of what works and why. Conducting rigorous impact evaluations is essential to make social spending more effective and efficient. Recent evaluations have for example shown that compulsory schooling laws may increase attainment, and that merit scholarships for girls and conditional cash transfers reduce the likelihood of dropping out. Among second-chance programs, the Jóvenes program in Latin America has shown positive results to lead young people back into the labor market in a cost-effective way (World Bank 2006; Attanasio et al. 2011).

Finally, in the context of this paper, in addition to the four recommendations put forward by Jimenez et al. (2012), we also suggest a fifth: we need to invest in comprehensive education programs that provide students with the values and skills that not only translate into to success in the labor market, but also enable them to live healthier and fulfilling lives. We discussed earlier the benefits that can arise from acquiring non-cognitive skills, as well as skills related to hygiene and good health behaviors. We also mentioned the importance of considering ethics and values in the education curriculum. Investments in innovative programs in areas such as these can play an important role in shaping character and thereby in providing benefits not only for individual students, but also for their community and for society at large.

There is no simple and universal remedy to the many challenges facing education systems in developing countries, from access to quality and equity. But for education systems to effectively prepare young people with the many responsibilities of adulthood, a comprehensive approach is required. While the various areas of policy focus mentioned here are no panacea, they can help young people—of this generation and those to come—make the best use of their talent and energy, and increase their chance of living happy, healthy, and productive lives.
References


