Raising Student Learning in Latin America: The Challenge for the 21st Century

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EXECUTIVE SUMMARY

Latin American countries have consistently performed poorly in international assessments—even after controlling for GDP per capita—well below OECD and East Asian countries. These results are even poorer among students of low socioeconomic status, indigenous students and afro-descendent students. In the face of meager student performance, understanding what students are learning and how they are learning have emerged as salient issues facing policy makers in a region that has already achieved considerable success in the area of access to basic education.

As Latin America embarks on a series of reforms addressing issues of quality and equity in basic education, information on the policies and programs that can contribute to achieving student learning will be vital, especially as the most marginalized and vulnerable children enter the system. This report brings to light recent advances in our understanding of the policies and programs that affect student learning in order to provide policy makers in Latin America and other developing regions tools for effective education policy making as well as to inform World Bank and other international agencies' operations in the education sector.

While many Latin American countries have expanded access to primary and secondary education, they have been losing ground relative to other middle- and higher-income countries. In 1960 Latin America, East Asia, countries in Scandinavia, and Spain all had similar levels of educational attainment. By 2005, the Latin America region was dramatically behind in getting its children to complete 12 years of basic education. Although in 1960 the proportion of adults that had completed upper secondary education was 7 percent in Latin America and about 11 percent in East Asia; by the early 2000s the figures were 18 percent in Latin America and 44 percent in East Asia.

Education access is not enough; learning is essential. A diversity of opinions exists regarding the purpose and function of education, but most would concede that one of the fundamental roles of schools is to provide students with the opportunity to acquire the skills, knowledge, and competencies that will contribute to their success in life. In light of recent gains in educational coverage, it is clear that achieving universal primary education is only a first step in the expansion of education. As the region progresses, it must concentrate on equalizing access to secondary and tertiary education, reducing socioeconomic and ethnic inequalities and, above all, turn its focus toward education's most fundamental purpose: ensuring that all children acquire the knowledge and skills needed to succeed in life.

What and how much students learn is a policy concern for various reasons, ranging from ensuring human rights to improving individual life outcomes, raising competitiveness, economic growth and development outcomes, and reducing inequality. Evidence from developing countries suggests that returns to learning may be even higher in developing countries than in developed countries¹ (Hanushek and Woessman 2007).

Quality of education can have an even larger effect on growth than quantity. Years of education may be a less important contributing factor to economic growth in the face of new research on the relationship between education quality and growth. Researchers have shown that the effects of quality of education, as represented by scores on international assessments, are much stronger than the effects of quantity, in some cases rendering the latter insignificant (Hanushek and Kimko 2000; Lee and Lee 1995; Barro 2001). But for education quality to bring higher incomes at the individual level and greater rates of economic growth for countries, an adequate macroeconomic and labor market environment is needed. Because cognitive skills influence a worker's ability to adopt new technologies and, consequently, her/his capacity to earn higher incomes, economies that foster innovation also tend to present greater economic returns to education quality. In addition, extensive research has documented the impact of openness of the economy on growth,² and recent research shows that the effects of education

¹ Ghana, Kenya, Morocco, Pakistan, South Africa and Tanzania

² Sachs and Warner (1997), as well as DeFerranti at others (2003) and Perry and others (2006) provide evidence that a countries' openness to trade is positively related to macroeconomic growth.

quality on labor market returns are stronger in countries where trade barriers are not substantial (Jamison, Jamison and Hanushek 2006).

Finally, education can help reduce long-standing inequalities across citizens of one nation. Latin America exhibits pronounced within-country variations in student achievement that often fall along socio-economic and ethnic or racial lines. The region also shows below average student achievement when compared with other regions of the world. In addition, the region exhibits the highest income inequality of any part of the world. Latin America finds itself in the particular situation, however, of having relatively typical levels educational inequality alongside high levels of income inequality. As countries in the region have carried out educational expansion thereby offering the majority of children equal access to learning opportunities, income inequalities, underdevelopment and poverty persist (DeFerranti et al. 2004). Evidence is increasingly showing that education quality—not just quantity—may be responsible for perpetuating such income inequalities and, conversely, could also mitigate them.

There are several reasons why student learning is the key challenge for education in Latin America. First, Latin American countries are among the lowest performers on international assessments of student skills. Second, countries in the region have a high percentage of students achieving well below minimum skill levels in all subjects. Third, in many countries, substantial gaps in achievement across students indicate high inequality in the learning outcomes of students from different backgrounds. Finally, few Latin American students in the region enjoy an education of high quality. Although in the region, poor and minority students indeed have a greater probability of achieving lower scores than students of higher socioeconomic status, equally troubling is that even the ethnic/racial majority and the socio-economically advantaged in Latin America are achieving below OECD students in international assessments of student achievement, dispelling the myth that the region's most privileged students get a good quality education.

As political and educational authorities turn their attention toward the task of improving learning, standardized tests have become a more important—and more controversial—element in the policy debate. Assessment systems provide information about the skill level of students at a certain point in time. Standardized tests

are designed to capture different aptitudes of students, and may measure student learning in a number of ways. The information resulting from the assessments is then made available to a variety of stakeholders, such as school administrators, education policy-makers, students, or parents. The usefulness of the information, of course, depends on its quality.

While the use of standardized assessments to measure student learning presents some disadvantages, it can also benefit education quality. First, assessments provide a quantitative measure of certain skills and knowledge that can be tracked and compared, allowing policy makers to assess their own success in meeting learning goals from year to year or from school to school. They can provide information to teachers and schools about their own strengths and weaknesses, and alert them to areas for improvement. Likewise, they can provide information to parents and students about areas where students are excelling or, conversely, struggling. In addition, they are the best indicator we have currently available and testing methodologies have improved over time and continue to do so.

National assessment systems have become widespread in Latin America. Since the 1990s, virtually all countries in the region have experimented with national standardized tests, with varying success. In some cases, such as APRENDO in Ecuador or PRONERE in Guatemala, assessment programs were funded by international organizations, but were abandoned soon after external funding ended. In other cases, countries have placed great emphasis on the implementation and publicizing of national assessments, which in turn have been implemented regularly and have become influential in education policy-making.

In addition to national assessments, a few Latin American countries have taken part in international assessments. Such assessments allow for comparison of achievement across countries, and monitoring of achievement at the national and international levels. As we have already seen, Latin American countries tend to perform poorly relative to East Asian and OECD countries in these assessments.

The use of the information collected by student assessments in Latin America varies greatly by country. For example, while some countries only circulate results internally among policy-makers, others write school-specific reports and organize

workshops to advise schools on how they may take advantage of the information. A review of how education evaluation offices in the region collect, process, and communicate student assessment information indicates that most Latin American countries lack optimal capacity to evaluate education performance.

This book attempts to contribute to our understanding of how student learning is achieved by further exploring factors and policies that influence learning. Learning hinges on myriad factors that can touch on any number of seemingly unrelated variables, from a parent's education and societal values regarding education to school infrastructure and the agricultural calendar. Policy, of course, can only address a small number of these factors. Several models have been developed to try to explain educational quality and effectiveness.³ This book approaches the problem of raising student learning by examining student-side, school-side, and system-wide variables, recognizing that the interactions among them jointly produce student learning. Students arrive at school with a series of endowments and behaviors that influence their learning. In the same way, schools have certain endowments and behaviors that affect what they provide students. Finally, organizational factors and the organization of the system as a whole also affect how and what students learn. While the endowments and behaviors of students are influenced by their families and households, those of schools are affected by teachers and administrative authorities. The economic, social and political context in a country provides the backdrop for these interactions. In short, quality of learning is a product of the interactions between students and schools, affected by organizational factors and education policy, as well as the social, economic and political context. Understanding how these factors affect student learning is important for devising policies in Latin America to raise education quality and equity.

Ensuring that all students learn requires having a theory of action for education provision and strong alignment in the roles and responsibilities of all participants in the education system to ensure education quality. International evidence suggests that there are at least three different institutional visions for education quality assurance that can achieve good results. We have identified these as

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³ For some early examples, see Lockheed and Verspoor (1991) and Heneveld and Craig (1995).

"quality contracts," "differentiated instruction," and "managed instruction." The challenge for Latin American countries seems to be to adopt an institutional vision that is adequate given their individual historical, social, and political contexts and to be consistent in the application of this vision to ensure that all students achieve at their highest potential.

While this book summarizes what we know about the policies that may contribute to raising student learning and how they do so, gaps persist in our understanding of how student learning is achieved and how education policy can be most effective in improving student learning in Latin America. First, an important area for future research involves impact evaluation of various types of teacher education programs in order to learn about the design of teacher education programs that are effective in changing what teachers know and do and thus yield concrete results in classrooms. Second, future research should focus on improving the methodologies available to provide information on participants' performance that is credible and reliable. Finally, future research—especially in Latin America—should involve understanding how societies move from complacence to demanding higher quality education system.

Throughout this book, we raise awareness about the importance of carrying out rigorous evaluations of education policies and programs. Most of what we now know about the effects of education policies on student outcomes is due to the foresight of policy makers who worked closely with researchers to enable experimental or quasi-experimental policy impact evaluations. To them, we are especially grateful.