Knowledge based economies have an advantage in today’s liberalized global market. OECD countries with extensive knowledge assets are able to drive rapid technological progress and reap the benefits in economic growth and rising living standards. Yet, Latin American and Caribbean (LAC) countries struggle to provide their citizens with the educational levels and advanced skills needed to create and apply new knowledge.

Recent empirical work by Sánchez-Páramo and Schady (2002) documents a remarkable shift in labor demand towards advanced skills in LAC countries. Producing skilled and knowledgeable people requires a strong education system, including access to good secondary and tertiary education. This note provides information about World Bank assistance to LAC countries to increase access to quality tertiary education.

The State of Tertiary Education in LAC

An analysis of tertiary education in LAC—presented at a glance in Figure 1—points to three main issues:

- **Low enrolment.** In LAC, about 20 percent of the relevant age cohort attend tertiary education. This compares to more than 50 percent in the OECD.
- **Under-investment in education.** LAC governments clearly under-invest in education. However, the share of education budgets allocated to tertiary education in LAC is equivalent to that in G7 countries (21 percent) and below the share in Western Europe (26 percent) and East Asia (29 percent).
- **Low relevance.** With the growing importance of knowledge and innovation for economic progress, universities increasingly need to integrate with society. In LAC, interaction is low, as measured by a low score in meeting the economy’s need (5.3 and 5.1 in G7 and LAC, respectively, on a 1-10 scale), under-supply of technical workers, and insufficient research collaboration between companies and universities.

In addition, case-studies from around the region indicate the following two issues:

- **Low quality.** Expanded enrolment has not been matched by staff recruitment and up-grade programs. Apart from Brazil, LAC countries cannot recruit university professors with doctorates because of the paucity of effective doctoral study programs in the region. This problem is exacerbated by global mobility of Ph.D. graduates. Also, a lack of accreditation mechanisms allows extreme quality.


Note: Each indicator is rescaled to a scale from zero to ten, where zero is the lowest country value found in the world and ten the highest.
differentials to persist. Poor quality tertiary education outcomes in LAC have negative effects on secondary education, the public administration and mid-level management in the business sector.

- **Low equity.** Tertiary education is primarily for the children of affluent households in LAC. Available data show that three out of four students come from the two wealthiest quintiles of the population.

This “snapshot” analysis of the shortfalls in tertiary education in LAC countries hides a very diverse pattern of country successes and stagnation. Figure 2 illustrates the diversity in gross enrolment profiles over time and across countries. There is similar variety in other aspects of tertiary education, including provision, governance, quality, and finance. So strategies and projects have to be tailored to each country’s reality.

Tertiary education projects make up 17 percent of the total education portfolio in LAC (Figure 3). These projects are closely related to the World Bank’s support for Science and Technology, and are complementary to support for preschool, primary, secondary and vocational education. In addition to lending operations, the Bank also supports tertiary education through technical assistance.

The Strategy for Tertiary Education in the Latin American and Caribbean Region has two pillars: (i) building a market for tertiary education, and (ii) improving the accountability and responsiveness of the Public Sector. The strategy is translated into five specific action lines (Figure 4):

- **Institutional capacity building** to support improvements in designing the legal, institutional and policy framework that governs the system.

- **Competitive and performance based formula funding,** applied mainly to public institutions to foster efficiency and accountability by linking funding to performance. Achieving efficiency in the public sector is key for two reasons: (i) to increase enrolment in relevant areas of education; (ii) to assure that education is provided in disciplines with perceived social impact that are not offered by private providers (i.e. Basic Sciences5).

- **Quality assurance mechanisms.** As a heterogeneous sector emerges with many new institutions, it is increasingly important to induce a culture of self-evaluation, monitoring and external quality assessment. Quality standards must be met and the general public must be well informed about the quality and relevance of education courses. New institutions must meet minimum teaching standards to be allowed to operate.

- **Labor market observatories (LMO)** provide the populace, business sector and public and private institutions with current information on patterns of supply and demand for high level skills. LMOs are becoming essential in guiding demand towards opportunities.
**Student loans.** Building a market for tertiary education would be incomplete without making it financially possible for qualified students to make use of educational offerings. Student aid programs are critical in any modern tertiary education system. The challenge is to find the right mechanisms to provide an incentive to people to invest in their own education, while reducing their risk to acceptable levels. Student aid systems often combine subsidies for the poorest students and loans for wealthier students.

The Bank is currently working with eight governments to enhance and strengthen their tertiary education systems. Project designs have been based on each country’s vision and existing system. They include students loans to increase access for low income students, quality assurance mechanisms, labor market observatories that gather indicators of relevance in the labor market, and public funding for innovation and institutional capacity building (Table 1).

Chile is an outstanding case of successful implementation and positive outcomes in capacity building and efficiency (Box 1).

**Lessons Learned**

The experiences drawn from these operations have inspired new projects, not just in tertiary education, but in the nascent effort towards a Lifelong Learning approach in Latin America. Overall, outcomes have been very satisfactory, but they are highly dependent on the country’s situation, particularly the level of political support.

Two practices have proven successful throughout the planning and implementation of operations:

- **Sector studies**, as an introductory stage or as a complement to an intervention, have been extremely helpful in achieving a comprehensive view of the tertiary education sector.

- **Integration of comprehensive teams** that combine World Bank staff with world class education specialists and experts from educational institutions within the country.

Moreover, the existence of complementarities should be stressed:

- Without strong initiatives in preschool, primary and secondary school, there is no foundation for expansion of tertiary education.

- Without broad based economic reform, to promote macroeconomic stability, free trade, a favorable investment climate, and effective labor markets, the economic value of tertiary education falls far below its full potential.

It is too soon to determine if these operations are helping LAC economies to participate better in the global knowledge based economy, because the real impact of tertiary education has a long time lag and knowledge building takes decades. However, it is expected that the countries of the region which have taken on the challenge to reform their tertiary education systems will be able to close the knowledge and income gaps with the leading economic regions of the World.

**Table 1. Active projects in Tertiary Education in LAC Region**

<table>
<thead>
<tr>
<th>Country</th>
<th>Institutional Capacity Building</th>
<th>Public Competitive-Funding</th>
<th>Quality Assurance mechanisms</th>
<th>Labor Market Observatory</th>
<th>Student Loans</th>
<th>Background Studies</th>
<th>Comprehensive Sector Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>*</td>
<td>*</td>
<td>*</td>
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<td>P(FY03/04)</td>
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<td>Brazil</td>
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<td>x</td>
<td>x (Red Cover)</td>
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<td>Bolivia</td>
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<td>Chile</td>
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<td>Colombia</td>
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<td>x (Green Cover)</td>
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<td>Jamaica</td>
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<td>x</td>
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<tr>
<td>Venezuela</td>
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<td>x</td>
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<td></td>
<td>x</td>
<td>x (White Cover)</td>
</tr>
</tbody>
</table>

**Key:** * - Disbursing Loans  P - In Preparation  X - Closed /Completed

Note: In addition the LAC tertiary education team is engaged: (i) LAC Flagship study for 2002 (knowledge economy); (i) ESW for tertiary education in the Caribbean countries; (ii) LAC thematic study on internalization of higher education (with the OECD); and (iv) LAC regional thematic
Box 1 - MECESUP Project in Chile

The Chilean government began the MECESUP project (Programa de Mejoramiento de la Calidad y Equidad de la Educación Superior) in 1998, with World Bank support. The project aims to achieve coherence in the system, institutional and financial efficiency, quality, relevance and equity through three components: (i) Policy framework and capacity building, which enhances the legal, regulatory and institutional framework, and develops a policy congruent with the environment and able to support the objectives. Two information tools were created: a management information system and a labor market observatory. (ii) Quality assurance, through designing standards for all educational levels and fields, and creating a national accreditation board. (iii) Financing, using a competitive fund to provide incentives for quality improvement and institutional performance, and to increase accountability. Student aid, in the form of loans and scholarships was expected to improve equity in access.

At mid-term, the project has proven successful in all components. (i) Institutional capacity: A new legal framework proposal was finalized in 2002; a new integrated management information system for Higher Education (NEHUE) with indicators became operational in 2001; and a competitive bid for establishing and operating the labor market observatory was won by Universidad Adolfo Ibáñez. (ii) Quality assurance: Two accreditation bodies were created, the National Commission of Undergraduate Accreditation (CNAP) and the National Commission of Accreditation for Graduate Programs (CONAP). Results include the production of materials for institutions to perform auto-evaluations towards accreditation, and accreditation of 58 doctorate programs and 7 undergraduate programs, with 83 more underway. (iii) Financing: Competitive funding was successful in attracting innovative proposals; calls for proposals in 1999, 2000 and 2001 resulted in 209 approved projects, from diverse institutions at the undergraduate, postgraduate and technical levels. Moreover, 68% of the approved funds went to projects in areas outside of the main cities. Competitive funding now amounts to more than 10 percent of total public funding to tertiary education compared to zero at project initiation. Also, performance indicators for equity of access have surpassed the project’s goals.

Figure 4 - World Bank Strategy for Tertiary Education

About the Authors

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For more information

http://www.worldbank.org/laceducation
http://www1.worldbank.org/education/

Notes

¹These findings are common to other developing regions, World Bank (2002a), Technical paper on Tertiary Education.

² For example Brazil is the LAC country with the highest share of faculty holding a PhD degree, 19%, World Bank (2002c). At the other end of the scale, only 2 percent of Colombian faculty have a doctoral degree, World Bank (2002b).

³ Private enrollment in Basic Sciences is about 6% compared with 94% in Public institutions in Argentina, 0% vs. 100% in Bolivia, and 4.5% vs. 95.5% in Chile.

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