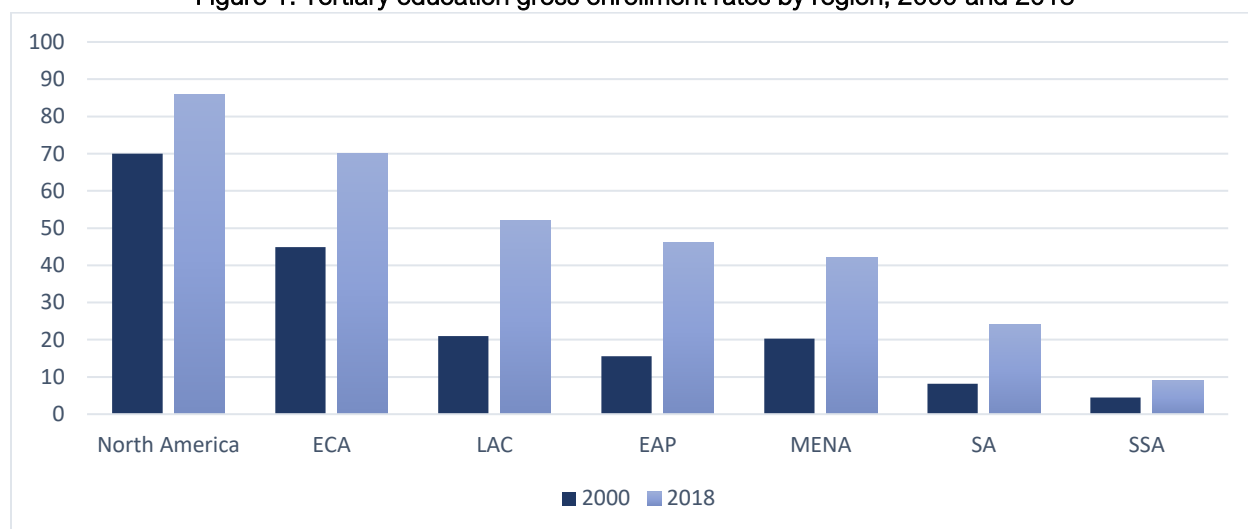


Context

The higher education system² in Latin America and the Caribbean (LAC) has grown exponentially since the early 2000s. Between 2000 and 2018, higher education gross enrollment rates in the region more than doubled (increasing from 21 percent to 52 percent) (figure 1), making LAC the region with the third-highest average higher education enrollment rate in the world after North America with 86 percent, and Europe and Central Asia with 70 percent. Currently, the system includes approximately 28 million students, 10,000 higher education institutions (HEIs), and 60,000 programs. The massive increase in access at the higher education level was driven by three main forces: (i) *larger secondary education completion rates*, which increased from roughly 70 percent in 2000 to about 81 percent in 2018; (ii) *a sizable supply-side expansion*, with about one-quarter of the current HEIs and half of the current programs created since the early 2000s³; and (iii) *demand-side policies*, such as student loans and scholarships, largely to finance greater access to private HEIs, especially relevant in Brazil and Colombia.⁴

Figure 1. Tertiary education gross enrollment rates by region, 2000 and 2018



Source: UNESCO UIS, 2018.

Note: EAP = East Asia and the Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SA = South Asia; SSA = Sub-Saharan Africa.

Despite the significant expansion in access, higher education systems in the region face considerable challenges related to equity, quality, relevance, and efficiency. Access continues to be highly *unequal*, as evidenced by the fact that the bottom 50 percent of the income distribution accounts for only 25 percent of all higher education students. Much of the access gap between high- and low-income students is due to disparities

¹This note was written by Marcelo Becerra, Juan Diego Alonso, and Micheline Frias, with contributions from Diego Angel-Urdinola and Stephanie Vergara Rojas.

² This note refers to higher education or tertiary education as the post-secondary education level, irrespective of whether the higher education institution is part of a university or not. The terms are used interchangeably throughout the text.

³ The bulk of HEI creation in the last 20 years was driven by the private sector, which now accounts for over 50 percent of the market share. The share of the private sector for HEIs, however, varies widely across countries, ranging from 25 percent in Argentina to 75 percent in Brazil.

⁴ Data on the number of HEIs and programs taken from Ferreyra et al. 2017. All other education statistics are based on UNESCO UIS 2018 data.

that arise before higher education. Additionally, while the increased number of HEIs has been able to somehow accommodate the excess demand, this has come at the expense of *quality* for the most part due to weak quality assurance mechanisms. Low quality is exacerbated by a wide range of study programs that are not aligned with the new needs of the labor market. Finally, graduation rates are a troubling indication that some things do not seem to be working. For instance, on average, about half of the population aged 25–29 in LAC who enrolled in a HEI have completed a degree—either because of delays in expected time-to-graduation or outright dropout.⁵ This graduation rate, at about 46 percent, compares poorly, for example, with that in the United States (67 percent). The higher education completion rate in the region has also declined over time, as individuals now aged 60–65 had an average completion rate equal to 73 percent.

In addition, higher education systems have made only limited use of technology. Except for Brazil, Colombia, and Mexico, which together produce more than half of the massive open online courses (MOOCs) in the region, the incorporation of information and communication technologies (ICTs) into tertiary education systems in the region remains low and has primarily focused on improving administrative processes rather than pedagogical methods.⁶ Overall, LAC has lower rates of digital technology adoption than similar countries in the Organisation for Economic Co-operation and Development (OECD). Barriers, such as taxes and tariffs, also often drive up the price of technology. For example, smartphones and tablets in some countries in the region are among the most expensive in the world.⁷ Therefore, many HEIs have been reluctant to incorporate e-learning into their schools and therefore lack well-developed approaches to using technology to enhance teaching and learning.

Coronavirus Implications for Higher Education

The COVID-19 pandemic has caused a major disruption to HEIs in the region. Most LAC countries have declared a general quarantine and closed schools to stop the spread of the virus.⁸ Approximately 97 percent of tertiary students—roughly 27 million people—are now out of school in the region. Since the school year for the bulk of HEIs programs usually runs by quarters or semesters, sudden massive HEI closures by early March 2020 have led to ad-hoc distance learning and mitigation strategies. In HEIs where classes have not been suspended, these strategies have been implemented to varying degrees across the region (see box 1 for examples). Given the unpredictable circumstances, the reopening of HEIs is not expected for some time. What follows is a discussion of the likely short and medium term implications of the crisis on critical dimensions of the higher education system across the region.⁹ These implications are the result of the combination of the preexisting challenges mentioned above, preparedness to provide distance education, and the expected intensity of the health and economic crisis.

Implications for teaching and learning

- **Equity.** Attempts to continue schooling through ICTs introduces equity concerns. Despite years of efforts to incorporate ICTs into teaching, little progress has been made in the region to date. Many low-income students lack computers or reliable access to broadband internet. Hence, a reliance on ICTs could exacerbate the existing inequalities given this “digital divide.” In addition, with the expected increase in economic problems to afford both direct and indirect costs of education, and less access to guidance counseling and the protective environment of university campuses, many students facing economic and socio-emotional difficulties may discontinue their programs.

⁵ Ferreyra et al. 2017.

⁶ Pérez Sanagustín, Maldonado, and Morales 2016; OECD 2015.

⁷ Dutz, Almeida, and Packard 2018.

⁸ UNICEF 2020.

⁹ World Bank 2020.

- **Quality.** Concerns about the quality of higher education may also be aggravated by the crisis. As a result of HEI closures due to the spread of COVID-19, many LAC countries have resorted to distance education to continue teaching and learning. Nevertheless, this sudden move has occurred with little time for faculty and students to prepare; to acquire the necessary equipment; or to improve their ICT, digital, or social media skills. Anecdotal evidence from experience so far seems to point to a significant increase in the teaching quality gap, because some faculty members are poorly trained or inexperienced in distance learning. With little support, over 1.9 million faculty members are experiencing stress and anxiety besides coping with their confined life during the pandemic, which may further impact teaching quality.¹⁰

In a region already suffering from low skills acquisition and few high-quality HEIs, the disruption of structured academic work and research may lead to further losses in knowledge and skills building, which could have an impact on expected earnings and productivity in the medium term. This impact is particularly high for students in low-quality private HEIs—also known in the region as “garage universities”—which are disproportionately attended by lower-income students. Unfortunately, LAC has a high share of these private institutions, which have only a very basic infrastructure and limited academic resources and typically invest more in marketing to attract students than in quality.¹¹

- **Relevance.** Relevance may also be an increased concern, especially for tertiary technical institutions. It may become very difficult to virtually teach technical subjects, which typically require labs and technical equipment. Few public and private HEIs in the region have attempted to develop virtual reality (VR) labs using 3D graphics with a desktop computer and a head-mounted display. These VR labs offer the advantages of providing practical training without the need of costly capital investment. Nonetheless, the region largely lacks capacity to develop VR simulation software adapted to the local language and to local pedagogical needs. VR labs can be used to impart practical training to higher education students and/or to provide lifelong learning opportunities for employed workers.

Further, students enrolled in university programs requiring lab work, field research, and/or practice, such as programs in the physical and material sciences, may be unable to acquire the applied skills necessary for the labor market. In some countries, like Argentina, teacher training programs are offered by tertiary technical institutions (not universities). Therefore, this may affect the quality of future teachers as practicums in the classrooms cannot be done. Finally, teaching socio-emotional skills, such as teamwork, problem-solving, active listening, and empathy, which are critical new skills to the labor market these days, may be more difficult in the absence of physical classrooms. New approaches to teaching online will therefore have to reassess how to incorporate virtual training on these “soft skills,” as well.

Box 1. Snapshot of ad-hoc COVID-19 mitigation efforts in LAC

Brazil. Fifty-six of the 69 federal universities have suspended classes indefinitely without any alternative educational measures. Of the 13 that have not suspended classes, six are maintaining partial openings and seven are offering remote learning. The National Ministry of Education has created a public dashboard dedicated to providing detailed and timely COVID-19-related HEI activity (that is, suspensions, remote learning, and partial openings) on its website.

Mexico. Beginning June 1, Mexico will begin regular assessments within each of the country’s 32 states to determine the degree of reopening HEIs. However, Mexico City, which accounts for 30 percent of Mexico’s confirmed COVID-19 cases, will not reopen universities until September. Meanwhile, teaching and research in HEIs continue with the support of a wide range of technological tools (virtual classrooms, remote communication platforms, digital materials).

Nicaragua. Following the Easter holiday on April 12, public universities classes have resumed as normal, despite protests from students, human rights organizations and health experts.

Sources: Americas Society/Council of the Americas (AS/COA) and UNESCO.

¹⁰ Data from World Bank Education Statistics (EdStats); <https://databank.worldbank.org/reports.aspx?source=1159&series=SE.TER.TCHR#>.

¹¹ Angulo-Galvis 2012.

Implications for admissions, examinations, and graduation

- **High-stakes exams.** Approximately 90 percent of all students enrolled in secondary education in LAC will likely be out of school for some time, and the percentage is growing rapidly.¹² This could hinder student transition from secondary to tertiary education due to disruptions in learning, exit examinations, and graduation. For instance, in Brazil the government has refused to cancel the secondary exit exam, known as the ENEM, despite a strong demand from students and parents to postpone it. Consequently, many students, particularly from vulnerable backgrounds, will be ill-prepared to take an exam that will determine their eligibility for higher education programs. Students in countries like Colombia and Ecuador are in a similar predicament.
- **Higher education completion.** The current situation, which could extend beyond what was initially planned, will increase the risk of definitive dropout, which is already a formidable challenge for the sector. To date, only Mexico and Peru have a higher education completion rate near that of the United States (equal to about 65 percent). COVID-19's disruption to learning and assessments is expected to delay student transition and graduation decisions even further, and disproportionately so in the case of students from low-income backgrounds, who are most susceptible to dropping out.

Implications for supply and demand

- **General public HEIs.** While it is too early to fully assess the pandemic's impact on the global economy because of its undetermined duration, COVID-19 will likely lead to a significant shock in the supply of general public HEIs. Global GDP growth is expected to decrease by 3 percent in 2020.¹³ This will be exceptionally difficult for the LAC region, which has suffered from slow growth in recent years and is projected to face a 5.3 percent GDP decline this year—the worst in its history.¹⁴ Consequently, public higher education systems that were already fiscally constrained will have to make some tradeoffs to increase *efficiency*, including potentially laying off faculty and staff and/or freezing salary increases, shortening and consolidating academic programs, and reducing investments in research and student support services, while trying to redirect more resources to online learning tools and resources. While this will present some challenges for the sector in the short and medium term, these actions may in fact benefit the system in the long run.
- **Technical public HEIs.** Like general public HEIs, technical public HEIs may suffer from less public funding due to the economic shock of the crisis. With few exceptions, such as Brazil, Chile, and Colombia, technical education is limited across LAC as more resources to further higher education have gone to universities, which have historically attracted more high-school graduates than technical HEIs because of their perceived higher quality in the region. However, given the shorter degree cycles (two to three years), demand for tertiary technical institutes, which has previously been driven by low-income students, may begin to draw in more nontraditional students. Therefore, technical public HEIs will also be faced with the challenge of improving their *efficiency*, given the pandemic.
- **Private HEIs.** Losses in tuition fees for private HEIs could mean a further reduction in the supply of higher education. Private universities, which account for the bulk of the higher education supply in LAC, face the possibility of having to downsize in the short term by reducing the number of personnel and scaling back program offerings. It is also possible that, in some instances, the severe economic recession that is predicted to follow the pandemic could result in the permanent closure of some private HEIs.

¹² Duvillier 2020.

¹³ Gopinath 2020.

¹⁴ *UN News* 2020.

- **Demand-side effects.** A decline in overall demand for higher education is also highly probable due to the pandemic. Imposed unemployment will result in financial hardships and the ability for individuals, especially from already low-income backgrounds, to pursue or continue tertiary education. With many jobs lost due to the crisis, many students may be unable to afford the direct and indirect costs of enrolling or re-enrolling in higher education, such as tuition and other attendance fees, textbooks, and room and board. In addition, the suspension of most international travel and school closures will likely reduce the enrollment of international tertiary education students, a phenomenon that has been steadily growing in recent years and is highest in Argentina and Mexico, with 88,873 and 25,125 international students hosted in 2017, respectively.¹⁵

Recommendations

The COVID-19 crisis deepened LAC's higher education challenges. The region, which has made progress toward the expansion of higher education, now faces the dilemma of needing to rapidly and creatively address the pervasive equity issues beyond the digital divide, while managing resources efficiently. Although the road ahead may seem daunting, the recommendations below aim to support the region with measures to not only mitigate the impact of COVID-19 in the short and medium term, but also to improve the equity, quality, relevance, efficiency, and sustainability of the sector in the longer term, and, thus, to “build back better.” These recommendations, although mostly valid for the region, will need to be adapted to each country’s unique context.

1. **Ensure equitable remote learning opportunities.** To safeguard education for all higher education students, the region will need to quickly optimize its *digital strategy* so it is informed by the current challenges and deploys a *multimodal approach* through a variety of available tools and channels, including radio, television, the internet, and cell phones. Rapid Response Surveys, which can consider feedback from faculty/staff and students, should be conducted where possible to assess and optimize the digital preparedness of HEIs to support teaching and learning and continued research. The coronavirus provides the region with an opportunity to expand access to ICT (for example, internet, laptops, tablets) and deepen engagement with students inside and outside of the classroom. Policies designed to respond to the pandemic’s impact on higher education must incorporate access to ICT as a priority. Therefore, governments will also need to rethink their teaching and learning approach and provide substantial training and support to faculty and staff to ensure the adequate use of technology to enhance learning and engage students.¹⁶ Such an effort calls for the incorporation of a range of technological tools—for example, polling, Google Docs, video tutorials, and annotation tools—beyond PowerPoint presentations.¹⁷ Chile provides a good example of what is possible in the region (see box 2).

¹⁵ Data from UNESCO UIS; <http://data.uis.unesco.org/>.

¹⁶ ICT policies may include, but not be limited to (i) providing higher education students and faculty/staff with laptops or tablets, where feasible; (ii) training students and faculty members on remote learning tools; and (iii) giving faculty members the flexibility to adapt their course plans and grading policies to the new modalities.

¹⁷ Derek Bok Center for Teaching and Learning, n.d.

Box 2. Chile's COVID-19 Higher Education Action Plan

To support HEIs in replacing face-to-face classes with alternative teaching modalities and to continue training and service delivery in the country, Chile has quickly mobilized its resources by (1) assigning a task force within the Ministry of Education (MINEDUC) to coordinate state-wide higher education interventions during the crisis; (2) ensuring access to online teaching tools (for example, Google Suite applications) for all HEIs; (3) dedicating funding for long-term distance learning solutions; (4) establishing an alliance with high-quality HEIs in the country to share their best practices with the higher education network; (5) mandating regular information dissemination from HEIs to MINEDUC and students to track updates on academic activity during the pandemic; and (6) extending student financial aid applications.

Chile's efforts are helping to address the impact of the pandemic on the higher education system not only in the short and medium term, but also in the long term.

Source: Ministry of Education of Chile 2020.

2. **Support vulnerable students.** To encourage re-enrollment and reduce the risk of dropout, particularly among students from low socioeconomic backgrounds, governments can explore ways to provide temporary monetary and non-monetary aid. Forms of assistance may include scholarships and affordable loan options, remedial courses, academic and career counseling, and peer mentoring, among others. Some countries and states like São Paulo are already providing similar measures in basic education. The World Bank team has been discussing with the Colombian government how to scale-up student loans under the current higher education project, while making them more affordable. Ecuador, with support from the World Bank, has been implementing computer-assisted student remediation programs in mathematics in its technical and technological institutes. To the extent possible, these measures should be supported in the interim as well as in the medium term, once in-person classes resume.
3. **Adapt admissions, examinations, and graduation policies.** Develop strategies for the current academic year that allow for the *progressive transition toward virtual HEI admissions and alternative plans for examinations and graduation policies*. For instance, HEIs can consider using a pass/fail system (or other relatively simple-to-implement systems) to make immediate decisions on transition and graduation. In addition, HEIs will need to establish a system for identifying at-risk students and creating more flexible options to keep these students from falling behind, such as creating customized coursework and schedules. Finally, a more robust system will need to be developed for scenarios that include extended or frequent closures during the 2020–21 (or 2021) academic year.
4. **Build capacity and sustainability.** Given the unpredictability of the pandemic and its repercussions, the region should develop *comprehensive medium and longer term action plans* that consider alternative scenarios, such as “best- and worst-case” scenarios to ensure efficient and effective service delivery during 2020–21 (or 2021) and beyond. To this end, *guidance and protocols* should be developed and all stakeholders, including local governments, HEI authorities, faculty, staff, students, and parents, should be informed about these alternate plans beforehand. HEI school leadership teams will also need to be trained to be able to respond and adapt more effectively. Therefore, plans must be designed using an *agile approach* to adapt to sudden changes and to improve effectiveness during implementation.
5. **Enhance quality assurance mechanisms.** Governments should work with their existing quality assurance agencies to develop flexible approaches to *evaluate the quality of the ad-hoc online and blended academic programs and adjust accreditation procedures and scheduling*. Furthermore, an ongoing working group consisting of members from the ministries of education, quality assurance institutions, and higher education administrators can help address operational challenges during this transition and develop standards for evaluating more distance/blended learning programs, which are likely to arise after this crisis.

6. **Improve the efficiency of technical higher education.** A more efficient technical higher education system could help mitigate the economic and educational shocks of the crisis. Technical higher education, if well designed and implemented, has the potential to improve worker productivity and integration into the labor market in LAC. Also, because it is shorter, it helps reduce student dropout and improves labor force participation rates. Therefore, if made more efficient (for example, streamlining fields of study to those more relevant to the labor market; reallocating infrastructure, equipment, and human resources; and increasing financial autonomy, supported by quality assurance), technical HEIs could become, in the medium term, a more viable solution for many students in the region, especially, but not only, those from low-income backgrounds.
7. **Promote fiscal sustainability.** Necessary adaptations, such as the integration of education technology, will require substantial resources. Countries will need to develop *a plan for resource mobilization* and notify stakeholders of potential budget cuts or reallocation in a timely manner to maintain trust and smooth execution. These plans will also need to factor in efficiency gains in the use of public resources, including through performance-based financing mechanisms, such as output-based funding, performance contracts, and performance set-asides (government grants for which HEIs can compete).¹⁸
8. **Develop innovative and collaborative provision options.** If COVID-19 offers a lesson for the region, it is on the *importance of innovation and collaboration*. The crisis is an opportunity to move toward cutting-edge service delivery, like cluster, experiential, partnership and, of course, online, models (figure 2).¹⁹ Some of these models take a relatively new approach to delivering higher education (for example, the partnership model), while others adopt an approach that is well established in some regions, like in North America, but not LAC (for example, the liberal arts model). Yet, they emphasize the need for leveraging technology, establishing strategic partnerships (for example, with the private sector, other universities, and the international community), and building interdisciplinarity.²⁰

Figure 2. Innovative models for higher education with potential to address certain challenges



Source: Economist Intelligence Unit 2020.

9. **Foster strategic stakeholder communication.** Developing a strategic communication plan will be key to ensure that citizens are informed about measures their governments are taking to ensure the safety of students, faculty, and staff, and to mitigate disruption to the academic process of HEIs during the pandemic. To this end, multimedia platforms, such as TV, radio, social media, and mobile, among others, can be used to provide timely information on impending institutional closures and plans to ensure smooth transitions. Feedback loops can also allow the community (academic and administrative staff, students, local community government) to provide input on the process and encourage transparency and cooperation.

¹⁸ Harnisch 2011.

¹⁹ Economist Intelligence Unit 2020.

²⁰ With support from the Bank, Chile and Colombia have initiated the establishment of HEI networks for the development of joint degrees and/or thematic research networks relevant to the local economy (see Annex for more details). These models did not necessarily emerge in response to the pandemic. However, they can be tapped to help address these challenges by increasing research and innovation, leveraging resources more efficiently, and building a more resilient higher education system in the long run.

Annex: Current and planned activities under World Bank-supported higher education projects

Country/Activity	Supporting alternate modes for education delivery	Building teacher capability/skills	R&D/innovation	Equity	Other
<p>Argentina: Improving Social Inclusion in Secondary and Higher Education Project</p>			<p>Supports the design and implementation of an action plan to overcome non-financial barriers for education progression and completion through different mechanisms. Among them:</p> <ul style="list-style-type: none"> i) TA to develop online modules to: <ul style="list-style-type: none"> (a) close academic gaps in specific subjects or areas as identified by the diagnosis; (b) develop specific socioemotional skills, and increase students motivation and belonging; (c) different interventions to close information gaps (e.g., information on returns to education and alternative career options). 	<p>Supports the PROGRESAR Scholarship program for 18 to 24-year-old vulnerable students in all education levels, including university and non-university tertiary by: i) improving the targeting, management, monitoring and efficiency of the program; ii) ensuring that HEIs submit academic certification for scholarship applicants on time; iii) improving the progression of students in their careers and the effectiveness of strategic career incentives in higher education.</p>	<p>Instrument: this is the first PforR in Argentina. The instrument provides clear incentives for a government program to achieve concrete results and allows dialogue during implementation to focus on institutional strengthening and capacity-building within the implementing institutions.</p>
<p>Colombia: Access and Quality in Higher Education Project</p>		<p>Supports advanced degrees for teachers and researchers.</p>	<p>Supports alliances of several universities for large research projects. The topics of the projects are health, the bioeconomy, and the social fabric, all of which are relevant for the current context. Adjusts the objectives of the research projects</p>	<p>The student loan component supports students from low socioeconomic characteristics to access education. As a response to the crisis, student loans will be given at zero real interest rate and without the need of a guarantor. Discussions on</p>	

			to make them even more relevant for the current context is under discussion.	possible scale-ups are also ongoing.	
Chile: Strengthening of State Universities Project		Supports increasing the share of teachers with a PhD in state universities (as percentage of total teachers).	Supports (a) the establishment of networks in priority areas of common interest for the development of joint degrees; and (b) the establishment of thematic research networks (in areas such as climate change).	Supports the development of quality standards (and their monitoring) for service delivery of remedial programs to prevent first-year dropouts. This program will likely benefit students with the largest university readiness gaps.	Supports the preparation and implementation of 10-year institutional strengthening development plans for all state universities.
Ecuador: Transformation of the Tertiary Technical and Technological Institutes Project	Supports computer-assisted student remediation in mathematics for first-year students in technical and technological careers.	Supports in-service teacher training (pedagogical and vocational) for up to 600 teachers in technical and technological institutes.	Supports the purchase of R&D equipment as part of an overall effort to equip laboratories in technical institutes. These labs aim to enhance and promote research in the subsystem.	Supports standardized testing to assess the level of “core learning” competences for first-year students (communications, analysis of information, and problem resolution). The referred test will help identify students with the largest gaps in such skills (which have high risks of dropout) in order to develop targeted remedial actions.	Supports the development of a more transparent and efficient system to finance technical and technological institutes. The project also supports the development of student tracer systems to monitor graduates’ labor outcomes after graduation.

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