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# International Briefs *for* Higher Education Leaders

Higher education leaders today recognize the urgency of developing an international strategy for their institutions but often lack the knowledge and perspective needed to inform good decisions. Students are graduating into an increasingly integrated international environment that, while offering exciting opportunities, also presents many challenges. Institutions must create educational environments where students will begin to appreciate the complexity of global integration but also develop skills to navigate it successfully. Faculty are seeking opportunities to collaborate with colleagues in other countries to develop globally-attuned academic programs and to expand research networks and collaborative projects. International outreach and initiatives enrich institutional culture but must be based on good information and analysis.

This series reflects a strategic collaboration between the American Council on Education (ACE) and the Center for International Higher Education (CIHE) at Boston College. Each *Brief* is designed to provide a succinct overview of current issues in international higher education and features articles written by leading scholars, policymakers, and practitioners with relevant statistics. Ultimately, this series is designed to help senior leadership develop cumulative knowledge to inform institutional strategy.

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## ARGENTINA, BRAZIL, CHILE:
## *"Engaging with the Southern Cone"*

### Introduction



### Argentina



### Brazil



### Chile



### The Southern Cone and the World

# Introduction

This fourth installment of International Briefs for Higher Education Leaders marks the two-year anniversary of ACE's collaboration with the Boston College Center for International Higher Education on this series. From the beginning of the project, our goal has been to provide timely information and thoughtful analysis to inform higher education leaders' thinking and decision making about global engagement by their institutions.

The series has struck a responsive chord in the higher education community. Motivated by an imperative to prepare students to live and work in the globalized environment of the 21st century, institution leaders are seeking ways to increase student and faculty mobility, internationalize the curriculum, and promote cross-border research through partnerships and collaborations with their counterparts abroad. International ventures take many forms and range in scope from faculty-to-faculty teaching and research collaborations, to exchanges, to joint and dual degrees, to full branch campuses.

Regardless of the type and scope, institution leaders need to consider the broader national higher education context when planning and establishing partnerships and other collaborations in a given country, to ensure success. Previous installments in the Briefs series have explored both the various modalities for collaboration and the realities of their implementation in specific countries and settings.

In this issue, we turn our attention to the "Southern Cone" countries of Argentina, Chile, and Brazil. The higher education systems in these three countries are developing rapidly, and share a common interest in internationalization and expanding their global reach. However, the top priorities and specific challenges facing higher education in the region vary by country.

In Argentina, increases in government spending on higher education combined with high levels of overall economic growth have given rise to larger budgets and greater financial freedom for many institutions. However, persistent low graduation rates, the need for further development of graduate education, and an economic slowdown are significant challenges. Though Chile currently boasts a gross enrollment rate of 55 percent—one of the highest in Latin America—the accreditation system established in 1998 has been called into question following alleged corruption, raising new concerns about quality. The Brazil Scientific Mobility Program has jump-started internationalization activities in that country, but other opportunities for cross-border cooperation are less clear. Access and affordability are still important challenges on the home front.

The following articles explore these and other key issues country by country and turn a critical spotlight on what all of this means for US higher education interests in the region. We hope the information and insights provided by our authors will help institution leaders assess the current landscape and make well-informed decisions about how best to create paths for student and faculty mobility and establish mutually beneficial partnerships and other collaborations in this rapidly changing area of the world.

Patti McGill Peterson

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# The Southern Cone of the Americas: Higher Education at a Crossroads

**Jorge Balán**

A century ago, US diplomats and scholars called Argentina, Brazil, and Chile "the ABC countries." These nations, together with Uruguay, seemed different from the rest of Latin America due to a strong European presence, rapid economic development, democratization, and the structure of their political institutions. The modernity of the region's higher education systems set it apart as well. A handful of publicly funded higher education institutions in each country—often modeled after and built in collaboration with European universities—aimed to train the professionals in law, medicine, and engineering required by governments to staff the state apparatus and lead the nations into the modern world of knowledge and ideas.

## Historical Perspectives and Recent Developments

While academic ties to Europe were strong during this period, higher education collaborations between the United States and the Southern Cone were rare, with a few exceptions (e.g., the Rockefeller Foundation's programs with medical schools in São Paulo and Buenos Aires). The US presence became stronger only after World War II, when these nations engaged in a new wave of modernization efforts aiming to introduce elements of the increasingly visible and prestigious American university model—such as academic departments, differentiated undergraduate and graduate cycles, and the research ethos. Daniel C. Levy wrote about the 1960s as a "golden age" of US assistance for university development in Latin America, sponsored by private foundations, the United States Agency for International Development, and the Inter-American Development Bank (Levy 2005). Leading US public universities became actively engaged in cooperation, as in the Chile-California program launched in 1963, which promoted technical cooperation in areas such as agriculture, education, water resource management, and transportation.

Momentum for such collaborations, and for the further development of the whole higher education sector, slowed, however, during the period of the mid-1970s through 2000, when the Southern Cone experienced lower average rates of economic growth than during the postwar period, marked economic cycles and chronic inflation, and a breakdown of democratic institutions—an unfavorable context for university modernization and international cooperation. More attention was focused on basic education during this time, with universal access at this level as a main education policy goal.

Since 2000, economic reforms have brought macroeconomic stability, fiscal surpluses, and a new wave of expansion of international trade to the Southern Cone—all of which have created a renewed energy for higher education development. Universal basic education, an increasingly urban population, improved labor market conditions, and a growing need for highly skilled workers have resulted in greater demand. More effective taxation systems have allowed governments to increase their investment in higher education; in addition to focusing on access, Southern Cone countries have doubled their support for research and development between the mid-1990s and today, expanding research capacity and advanced training within the universities. National research agencies have increased funding for intraregional as well as international collaboration with North America and western Europe; greater research output and more citations for joint publications have heightened the region's presence and participation in the international scientific arena.

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## Quantity Without Quality?

In spite of these positive trends and rising enrollment levels in recent years, the quality of higher education is of increasing concern to academics and policymakers in the region. To the extent that rankings are indicative, the overall performance of higher education in the Southern Cone can be described as "fair." In the 2013 Universitas21 ranking of 50 national higher education systems, Chile shows up slightly higher than Argentina and Brazil; all three systems are ranked below those in North America, western Europe, Australia, and several eastern European and Asian countries, but above those in other emerging economies such as Turkey, India, and South Africa (Williams et al. 2013). SCImago's 2013 list of the top 20 research universities in Latin America includes 16 from the ABC countries (three are in Mexico and one in Colombia)

(SCImago 2013). No Latin American university, however, is listed among the top 100, or even 200, in the global rankings.

Latin America's global ranking performance may be partly explained by the fact that teaching remains a main focus of universities in the region. The professional schools are still the core academic units within Latin American universities and tend to employ part-time faculty with only marginal involvement in research to teach the bulk of undergraduate courses.

Beyond rankings, there are significant concerns about the quality of teaching and learning taking place on campuses in the region. Poor quality at the primary and secondary levels, combined with relatively unselective admission procedures for much of higher education, result in a large proportion of enrolled students who are unprepared for college-level coursework. Low graduation rates at many institutions, particularly in Argentina, suggest that students are not gaining the skills and knowledge needed to overcome this initial lack of preparation. Overall, more information is needed about student progress and learning outcomes in the region, particularly given the rapid growth in number and size of primarily teaching-focused institutions in recent years. Mandatory accreditation for first-degree programs in the regulated professions in Argentina and Chile represents a major step forward in terms of quality control, and may serve as a model for broader regulation going forward.

## Institutional Differentiation

Argentina, Brazil, and Chile legally regulate "universities" as different from other higher education institutions, although in the real world the boundaries are often fluid. Universities are authorized to issue long-cycle, academic degrees in a variety of areas—including the prestigious professions—and to develop research and graduate programs. There are many fewer universities than other higher education institutions. The universities enjoy greater academic autonomy and prestige than institutions in other sectors. Although none of the three countries has formally defined what is a "research university," research capacity within higher education is heavily concentrated in just half a dozen or fewer universities in each country, most of which are publicly supported and administered.

The private/public dimension is unique to each country. As a rule, private higher education dominates the nonuniversity sector, but even among universities, a majority of students in Brazil and Chile are enrolled in private institutions that employ mostly part-time faculty and pay lip service to the research function. Public universities are almost entirely publicly funded in Brazil and Argentina; undergraduate studies at public institutions are tuition-free in both countries and graduate education as well in Brazil. In Chile, older universities benefit from small institutional subsidies and receive indirect public support tied to student aid, but all charge tuition and have other sources of income. The nonuniversity sector is entirely dependent on student tuition payment.

Brazil has authorized private for-profit higher education institutions since 1996, a segment that has tended toward concentration and rapid growth. The recent merger of the two largest for-profit providers resulted in a giant system, with 1 million students in total. The next largest system emerged from acquisitions by Laureate International Universities, a US-based corporation. Chile and Argentina formally limit the operation of for-profits to the nonuniversity sector, although it is often assumed that many nonprofit universities find a way of distributing benefits to their owners, the topic of a recent congressional investigation in Chile.

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## The Near Future

In the coming years, improvement in secondary education is expected to result in more and better-prepared high school graduates applying to higher education in the Southern Cone countries, though growth rates in the undergraduate sector are likely to be tempered somewhat by demographic trends. The potential for growth is greatest in Brazil since the quality of secondary education is only recently emerging as a policy priority, and net enrollment rates in higher education are considerably lower than in Argentina or Chile. Enrollment in graduate education is expected to continue growing at very healthy rates in all three countries, in particular at the master's degree level.

Quality concerns throughout the education system will become increasingly urgent over the next few years. Higher education is expected to play a strategic role in this regard, since enhancing the quality and quantity of graduates is considered crucial for society and the economy at large and is also a key input for quality improvement in primary and secondary education.

International engagement is also a priority for institutions and governments throughout the region. In Brazil, academics and policymakers are keenly aware of the need to increase the international flow of students, faculty, and researchers from the current low levels of participation. Language barri-

ers, however, are a more serious challenge in Brazil than in Chile (where English is now mandatory from primary school) or in Argentina, countries that are attracting large numbers of study abroad students and faculty from the United States and elsewhere.

# Argentine Higher Education: Main Features, Key Issues, and Challenges

**Ana García de Fanelli**

From the late 1800s until the military coup of 1930, Argentina ranked among the world's richest countries. Led by a strong increase in agricultural exports during this period, Argentina's economy became integrated with international markets. Prosperity led to a wave of immigration from Europe, especially from Italy and Spain. As a result, Argentina's population rose from 1.7 million inhabitants in 1869 to almost 8 million in 1914.

Economic growth spurred rapid social progress and greater political importance for the newly developed middle class, which in turn produced an expansion in urban population and state bureaucracy. This early economic development also fostered the public university sector and, especially, one of the major players in elite and professional training, the University of Buenos Aires (UBA), which was founded in 1821. UBA's alumni have been awarded four Nobel Prizes—two in physiology or medicine, one in chemistry, and one in peace.

The disarticulation of international trade flows, generated by the crisis of the 1930s, interrupted the expansionist process in Argentina; and political upheaval and frequent fiscal crises between 1950 and 1980 had a significant negative impact on Argentine universities. However, 30 years of political stability following the restoration of a democratic government in 1983, coupled with a period of strong economic growth between 2003 and 2011, have shaped a favorable environment for the consolidation and quality improvement of a differentiated and expanded higher education system.

## Institutional Landscape

The Argentine higher education system consists of 55 public and 65 private universities and "university institutes" (which specialize in only one field of study, for example, in medicine). There are also approximately 2,000 small tertiary public and private nonuniversity institutions whose purpose is to train primary and high school teachers and offer short vocational programs. Public universities and university institutes are funded by the federal government, whereas private institutions depend almost entirely on student tuition and other private funding (donors, the Church, firms, etc.).

Although all public and private universities perform the same kinds of teaching and research functions, they differ according to their prestige and enrollment. Also, within each public university, there are some research-intensive faculties (mostly in the basic and agronomic sciences) and other teaching-oriented ones that train students in the main traditional professions (law, public accountancy, administration, psychology, architecture, medicine, and engineering).

The private universities and university institutes encompass a variety of both secular and religious institutions. Only a few universities—like Torcuato Di Tella, San Andres, and Austral, among others—fit the elite type. They are small institutions with a critical mass of full-time professors with PhDs, full-time students, research activities, high-quality facilities, and good libraries. According to Argentina's Higher Education Act, all private universities, including foreign institutions like the Bologna University that established a campus in Buenos Aires City, should be not-for-profit organizations.

## Enrollment

Argentine higher education showed strong development well before other Latin American countries. As a result, Argentina now boasts a significantly higher gross enrollment rate than most other countries in the region—72 percent in 2010—more than half of which are women. With almost 1.7 million undergraduate students in 2010, the university sector—including both public and private institutions—is by far the most important in terms of enrollment, social prestige, political visibility, and functions. Although the private sector has more institutions overall than the public sector, it represents only 20 percent of the total student body.

In spite of its land mass of almost 3 million square kilometers, one-third of both the Argentine population and the university student population are concentrated in the capital city of Buenos Aires and its periphery (known as Greater Buenos Aires). Of particular importance is the University of Buenos Aires (UBA), the largest and most prestigious national university in Argentina. With an enrollment of about 260,000 undergraduate students and 15,000 graduate students, the UBA consists of 13 faculties, which are located throughout the city. UBA alone captures around 18 percent of the country's undergraduate and graduate enrollment, as well as its alumni. In 2010, approximately 13,000 international students were studying in undergraduate and graduate programs at UBA.

The UBA and other public universities have seen a remarkable rise in undergraduate enrollment since the 1970s, which is largely explained by free tuition and open admission policies. Though some universities or schools administer entrance examinations or require students to take specific courses (this is true of medical schools in particular), all high school graduates are eligible to attend a public university. In reality, however, underprepared students are effectively filtered out in the first year, when about half of enrolled students drop out.

## University Governance and Academic Structure

According to the 1995 Higher Education Act, national universities enjoy substantial autonomy, which is codified in their individual charters or statutes. Public universities have the authority to select their own leaders (presidents and deans) and collegial bodies with the participation of professors, students, and alumni. Among the collegial bodies, the most important is the higher council that is comprised of the deans of each faculty and representatives from professors, students, and alumni. The universities' authorities also manage their own human resources, allocate funds, and design the curriculum.

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Private universities also enjoy autonomy once the National Commission of Evaluation and Accreditation (CONEAU) has recognized that they meet its official standards. During their period of provisional authorization, CONEAU monitors private universities' annual reports and modifications introduced in their activities. If the steering reports indicate that the university is performing well after six years, the institution is granted autonomy.

Compared to public universities, private universities are more hierarchical in their organization, with less participation of the faculty senate in decision making. Private university presidents are elected by university boards, whose composition reflects the orientation of the founding organization (for example, religious or business orientation). Faculty representation is very limited, and university presidents appoint deans and other administrative staff.

In terms of academic structure, the majority of Argentine universities are organized in professional or discipline-based schools or *facultades*. Faculty at these schools are hired mostly on a part-time basis, their principal job being the practice of their profession in the external labor market. This characteristic of the Argentine university faculty negatively affects the development of research functions, as well as the consolidation of an academic profession committed to the planning and implementation of the curriculum and the counseling of students.

Academic programs are based on the long-standing European model, which features long, specialized undergraduate degrees with few elective courses. These include *Licenciado* degrees and professional degrees in medicine, law, dentistry, engineering, psychology, and other fields, which can take between five and six years to complete. In many respects, undergraduate degrees of this type are equivalent to a combined bachelor's degree and professional master's degree in the United States.

Graduate programs promote further specialization (especially in engineering and medicine), with master's and doctoral degrees in a wide variety of disciplines. While undergraduate education at public universities is tuition free, including courses taken by foreign students, tuition fees are generally charged at the graduate level.

CONEAU accredits all professional undergraduate programs (the so-called "state regulated" degrees) and all graduate programs, in order to guarantee a level of quality. Moreover, the degree accreditation is promoting changes in the programs of study. Universities are reforming the undergraduate programs, in order to comply with CONEAU's standards and external peers' recommendations. For example, admission into medical programs is now more restricted than in the past, and many state-regulated undergraduate programs have begun to include supervised internships within the curriculum.

All graduate and several regulated undergraduate programs must be accredited in order to have national legitimacy. Institutional accreditation was addressed in the 1995 higher education legislation, although it has not been widely implemented. CONEAU conducts a voluntary external evaluation of public and private autonomous institutions to promote quality improvements.

## Internationalization and Consolidation

In general, government policies and events of the last decade

have bolstered the development of Argentine higher education and created a positive climate going forward. The government and institutions have prioritized internationalization, resulting in increased student and faculty mobility, agreements with prestigious foreign universities that offer new opportunities for both undergraduate and graduate students, and the creation of international research networks.

More broadly, in 2010, public expenditure on higher education exceeded one percent of Argentina's gross domestic product; increases in government spending on higher education combined with high levels of overall economic growth have given rise to larger budgets and greater financial freedom for many institutions. This scenario offers an opportune moment to consolidate the Argentine higher education sector, focusing on quality improvement.

> *Although all public and private universities perform the same kinds of teaching and research functions, they differ according to their prestige and enrollment.*

In order to enhance the overall quality of the system, three areas will require particular attention. First, universities should increase their graduation rates to boost the country's stock of advanced human capital. Second, compared to higher education structures in North America and Europe, the undergraduate level is quite developed, while graduate education is seriously underdeveloped and needs substantial improvement. Finally, it is important to encourage greater enrollment in basic sciences and engineering. To address the latter, the Argentine government launched a Strategic Plan for the Training of Engineers in 2012 and, in 2009, a scholarship program targeting low-income students who major in science, technology, engineering, and mathematics fields. This scholarship program also tries to promote retention and graduation in these fields. Unfortunately, the improvement of graduate-level training in these areas has not received enough attention by the government.

In sum, in order to continue improving both productivity and innovation, Argentina should continue to pursue a high-quality higher education system that trains more scientists and professionals, both at the undergraduate and graduate level. Thus, experience and collaboration with developed countries will be crucial.

# Argentina: Student and Scholar Mobility

**Karina Felitti and Andrea Rizzotti**

Argentina is known worldwide for tango, soccer, its beef and wine, Eva Perón, and the *madres* and *abuelas* of the Plaza de Mayo struggles. More recently, for the last 10 years the country has been engaged in a process of social and economic transformation, following decades of political upheaval and a major financial crisis at the beginning of the new century. Today, Argentina's universities are placing a growing emphasis on internationalization and global engagement, creating a relatively positive context for student and scholar mobility going forward.

## A Receptive Host

According to official statistics, the number of foreign students studying in Argentina doubled between 2006 and 2013; currently, there are approximately 50,000 undergraduate students from abroad enrolled in Argentine colleges and universities, along with several thousand graduate students (Pintos 2013). About 70 percent are from other Latin American countries, with the remainder coming mostly from the United States and Europe. Within Argentina, the most popular destinations for foreign students are the city of Buenos Aires (79.5 percent), followed by the Cuyo region (7.1 percent)—which includes Mendoza City—and the region surrounding the city of Córdoba (4.9 percent) (SEA & CAT, n.d.).

According to *Open Doors*, 4,763 US students studied in Argentina during 2011–2012, which represents a 3.8 percent increase over the previous year (IIE 2013). In the capital city, specifically, 14 percent of the students who responded to the Buenos Aires city government's *First International Student Survey in Buenos Aires* between September and October 2011 were from the United States (Buenos Aires Observatory for International Commerce 2013).

Typically, US students who choose Argentina as a host country stay for one or two semesters, living with host families and combining their formal studies with travel around Argentina and to neighboring countries. In terms of academics, Spanish-language study is a main focus; indeed, in recent years Argentina has become the most popular destination in Latin America for Spanish-language study, overtaking other more "traditional" study-abroad destinations—such as Mexico, Ecuador, and Costa Rica, which were favored in the 1990s.

Argentina offers a number of advantages for both short- and long-term foreign students. The quality of higher education is

generally high, and the country's public institutions offer free undergraduate education. Health care throughout the country is also free, and foreign students who stay for at least two years and wish to continue their studies can obtain a resident visa that allows for employment. International students and others from abroad generally find easy acceptance in Argentine culture; and in response to increasing international enrollments in recent years, many universities are focusing more attention on enhanced teaching methods and other strategies to create a positive learning experience for students from diverse backgrounds.

## Argentine Students Abroad

Because undergraduate education in Argentina's public universities is tuition-free, study abroad often does not make sense for Argentine students, from an economic perspective. Even at the graduate level, for which Argentina's universities do charge tuition, the cost is relatively low compared to many other countries. Nonetheless, the number of students going abroad has increased somewhat in recent years and most leave for only a semester or a year in order to complement their degree program at home, with a short-term international experience. At the graduate level, for instance, just 3 percent of Argentine students complete a full degree abroad. The most popular destination countries for Argentine students (in order of preference) are Spain, France, Brazil, the United States, Italy, Germany, Mexico, the United Kingdom, and Chile.

In line with global trends, the Argentine government has begun implementing new policies and programs designed to increase outward student mobility. Examples include the BEC.AR program—a name that is a clever play on the Spanish verb *becar*, which means to award a scholarship. BEC.AR aims to support 1,000 Argentines to study abroad in the next four years (with a focus on graduate students and professionals), as well as cooperation agreements signed by the National Scientific and Technical Research Council to facilitate exchanges and collaborations with higher education institutions in Germany, Austria, Belgium, Japan, Slovakia, Spain, China, Mexico, and other countries. Universities, too, are offering more scholarships and programs to encourage study abroad; currently, engineering and technology are a primary focus for both government and university initiatives, though support is also available for students in other fields—including economics, business, education, and social sciences.

## Scholar Mobility

According to the International Organization for Migration, Argentina has seen an increase in both immigration and emigration rates in the past 10 years. This is due at least in part to bilateral and multilateral migration policies—implemented by the national government to promote engagement with the world and encourage social and economic development at home. Among these policies, the program known as RAÍCES (*Red de Argentinos Investigadores y Científicos en el Exterior*, or, in English, Network for Argentine Researchers and Scientists Abroad) addresses scholar migration in particular. Launched in 2007, the program is intended to encourage repatriation of scientists who left the country during the 2001–2002 social and economic crisis and to reintegrate them into the country's science and technology infrastructure. Target fields include agroindustry, energy, health, social development, sustainable development, and others identified in the National Plan of Science, Technology, and Innovation as strategic priorities for the country. As of October 2013, 1,000 scientists had returned to Argentina as part of the program (Ministry of Science, Technology and Productive Innovation 2013).

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In terms of short-term mobility, the Fulbright Commission works continually to develop and promote scholar exchange between Argentina and the United States. Each year, Fulbright provides seven research grants for US scholars to work in Argentina and sponsors 15 English Teaching Assistantships that bring US citizens to Argentina as language instructors. In addition, US faculty members, scholars, and other professionals come to Argentina through the Fulbright Specialist program to engage in short-term collaborative research projects.

At the institutional level, many Argentine colleges and universities are introducing initiatives to promote faculty exchange and engagement in international research networks. An increasing number of institutions, for example, are creating "international cooperation departments" to facilitate connections. The new FAEI (Argentine Forum for International Education) aims to bring together Argentine institutions to promote international education within Argentina and abroad.

Though national, international, and institutional policies and programs are positively impacting scholar mobility to and from Argentina, there are still a number of challenges. Gen-

der is an important issue; women scholars, particularly in the science and technology fields, are less likely than their male counterparts to pursue opportunities abroad. Policies and programs that target women scholars and provide opportunities to spend time abroad at various stages of their careers should be a priority. More broadly, policies are needed to increase investment and human resources in fields critical to national economic and social development. There is a need to establish clear pathways for young scholars—both from Argentina and from abroad—seeking to build their careers and continue their professional development as part of the country's scholarly workforce.

### Future Possibilities

Last year, Argentina celebrated the 30th anniversary of its return to a democratic government in 1983. Nonetheless, the social and economic crisis of 2001 brought substantial upheaval and continuing change—as well as new barriers to change in some areas. As Argentina navigates these changes and charts a course for itself going forward, student and scholar mobility can play an important role by creating connections with the rest of the world and bringing fresh perspectives and new ideas to the process.

## Pursuing Partnerships with Argentina

**Liz Reisberg**

As the best and worst of times, these are certainly challenging times for collaborations with Argentina, due to government policies and various systemic and logistical issues. Nonetheless, interest in global engagement is growing in the Argentine higher education sector, and efforts to connect with counterparts in the United States and other countries are underway at a variety of institutions.

The most common type of collaboration is informal and takes place at the level of professor-to-professor. Few universities offered PhDs (or even master's degrees) until recently. Senior faculty in Argentina who hold advanced degrees are likely to have earned them abroad and maintain contact with colleagues at the institution they attended. Master's degrees are ubiquitous today, but the availability of high-quality doctoral programs is still limited; and this continues to motivate many serious scholars to go abroad. The relationships cultivated during study abroad often become the basis for joint research, joint presentations at conferences, and other academic activities.

Institutional partnerships are relatively new in Argentina. It is becoming increasingly common, however, for universities to have offices to promote and support international activities at the institutional level, but still with limited funding and staff. The following examples of global engagement activities come from only a few of the Argentine universities with a global reach, but the models and activities are indicative of broader trends.

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### Public Institutions

With 22 percent of Argentina's higher education enrollment, the University of Buenos Aires (UBA) sets the tone and establishes trends for the system as a whole. In 2010, UBA created an office of the Secretaría de Relaciones Internacionales (Secretariat of International Relations) to implement UBA's international strategy, an administrative model that is gaining popularity among other institutions.

As part of this strategy, UBA has allocated funds for a number of new programs to encourage global engagement. Money is available to support faculty participation in international conferences, such as the annual meetings of NAFSA: Association of International Educators and the European Association for International Education (EAIE), as well as for short "missions" of up to 15 days to develop contacts at universities abroad. The UBA has signed a number of agreements for faculty exchanges, under which it pays the cost of travel, and the host institution abroad covers living expenses for the visiting professor while in residence. The reverse is also true; UBA will cover living expenses for visiting faculty when the home institution pays travel costs. Funding is available for PhD students to conduct research abroad, and the UBA has also established partnerships with universities in France to support and supervise doctoral study for young UBA faculty.

Global engagement activities are also taking place at the unit level. UBA's School of Agronomy offers a course in English every July, which is open to both domestic and international students. An important purpose of the initiative is to build ties with institutions abroad; the University of Illinois–Urbana Champaign, for example, has been a key source of enroll-

ments. Past courses taught in English have included Management of Agro-ecosystems, Global Change and Ecological Consequences of Human Impact, and Introduction to Crop Physiology.

Smaller public universities, such as the Universidad Nacional del Litoral (UNL), are also developing international strategies and are often easier to approach than a behemoth like the UBA. These institutions tended to focus on Europe and other Latin American countries in the past, but are increasingly interested in new initiatives with the United States. Like the UBA, smaller public universities are establishing International Program Offices and attending NAFSA and other international conferences to meet potential partners. Dual degree programs are a particularly attractive kind of partnership.

## Private Institutions

In the private higher education sector, a handful of comparatively small, young, and elite institutions are most likely to have the motivation and infrastructure to pursue international partnerships and initiatives. These universities tend to have larger percentages of full-time faculty and more stable leadership than public universities; many of the professors have completed graduate study abroad and are fluent in English. The Universidad San Andrés (UDESA) and the Universidad Torcuato Di Tella (UTDT) are good examples. The UDESA enrolls approximately 900 undergraduates and has signed well over 50 agreements with universities in more than 20 countries, primarily for the purposes of student exchange; the UTDT enrolls approximately 1,500 undergraduates and has signed 87 exchange agreements.

Beyond student exchange, the UTDT offers ample opportunities for faculty to go abroad as visiting professors, as well as to welcome faculty from abroad to give seminars and contribute to the curriculum. As at other institutions, one-to-one collaborations established by individual faculty members are also prevalent; the university is currently hoping to develop dual degree programs with partner institutions abroad, and such relationships may form the basis for these types of program or institution-level ventures down the road.

## Practical Challenges

While there is growing interest in global engagement among Argentine institutions, there are an array of factors that make it challenging for them to establish partnerships and collaborations at the institutional level; a number of these pertain particularly to relationships with counterparts in the United States.

*University staffing.* At Argentina's public universities, senior officers are elected. When rectors or deans leave office, many members of their team leave with them, which makes the long-term planning and commitment for successful partnerships very difficult. In addition, with the exception of a handful of small, private elite universities, the preponderance of faculty appointments are part-time, and faculty members' presence on campus is often limited to the time they spend in the classroom. Given this situation, it is difficult to integrate faculty participation into institutional agreements, and faculty rarely have the time (even if they would wish it) to establish relationships, let alone rapport, with visiting international students.

*Currency restrictions.* The Fernandez de Kirchner government has imposed severe currency restrictions that have made it somewhat tricky to move US dollars in and out of Argentina. With an "unofficial" parallel market for currency exchange, it is difficult to establish the value of foreign currency, and there are cumbersome bureaucratic procedures to obtain foreign currency for study or research abroad.

> *In the private higher education sector, a handful of comparatively small, young, and elite institutions are most likely to have the motivation and infrastructure to pursue international partnerships and initiatives.*

*Academic calendar.* The academic year in Argentina begins in March and ends in December. Summer session in the United States overlaps the first and second semester (cuatrimestre) in Argentina. The summer term in Argentina is January and February. Only the second semester in Argentina comes close to aligning with the US calendar, which is problematic for exchanges and other activities lasting more than a few weeks.

*Reciprocity*. Another complication for student exchanges is that coursework done by Argentine students abroad is rarely recognized for credit toward a student's degree, hence adding time (as well as cost) to degree completion. Nonetheless, there is greater interest in US study among Argentine students than there is among American students for study in Argentina; this imbalance is problematic for Argentine private institutions in particular, which like their counterparts in the United States are dependent on tuition revenue and therefore strive to maintain a balance of outgoing and incoming exchange students.

### Looking Ahead

The current environment in Argentina is not ideal for new collaborative initiatives. In addition to the practical challenges outlined above, the rhetoric of the current government is decidedly anti-United States, although the same government is interested in sponsoring talented Argentines in US graduate programs. It should be kept in mind that with galloping inflation and a very controversial president, the economic and political environment is somewhat unpredictable for the short and mid-term.

Despite these caveats, however, there is great interest in and support for academic collaboration with the United States and for global engagement more broadly. The agreements governing these activities may just require more creativity and flexibility to address Argentina's unique circumstances and particular challenges.

## Overview of the Brazilian Higher Education System

**Marcelo Knobel**

Brazil has attracted much attention as a strong emerging economy. With a gross domestic product (GDP) of US$2.2 trillion in 2012, Brazil is the world's seventh wealthiest economy. It is also the largest country in the region, with a population of nearly 200 million inhabitants. Despite some important achievements in the last decades, inequality remains at relatively high levels for this middle-income country. After having reached universal coverage in primary education, Brazil is now struggling to improve the quality and outcomes of the system. The postsecondary education scenario is also changing rapidly, balancing an interplay between history and tradition, economic development, regulation, and accreditation. Higher education plays a fundamental role in the huge challenges that Brazil faces in order to assure both economic growth and social justice.

### Organization of the Postsecondary System

Brazil has an unusual postsecondary educational system, with a relatively small number of public (federal, state, or municipality) research universities (completely tuition free), and a large number of private institutions—both nonprofit and religiously affiliated as well as for-profit oriented. Almost two-thirds of the private institutions are for-profit, many of which are of questionable quality. There is also a small but growing segment of vocational post-high school education (about 10 percent of the total enrollment figures).

Differentiation in the private system has resulted from an education law passed in the 1990s. Private institutions can be established as for-profit or non-for-profit, and can be single faculties (*faculdades*), university centers (bringing together several schools, with a focus on teaching), or universities (conducting some research). The "university centers" were supposed to have better qualified teachers than non-university higher education institutions, as well as superior quality (thanks to greater autonomy in the creation of new programs). However, three-quarters of these centers are for-profit, quality has been undermined by other objectives, and autonomy misused.

Higher education institutions are organized according to the European tradition. Undergraduate students choose their majors prior to taking the entrance exam (the so-called *vestibular)*. Once they are accepted to a specific course, it is extremely difficult to change majors, unless the student starts over again from the beginning. There are only fledgling experiences of "college" type undergraduate programs, similar to the North American or British model, but the acceptance of general education by Brazilian society is still unclear (Andrade et al. 2013).

> *Higher education plays a fundamental role in the huge challenges that Brazil faces in order to assure both economic growth and social justice.*

### Enrollment—Expansion, but with Unequal Opportunities

In 2012, there were more than 7 million students enrolled in Brazil's undergraduate programs—73 percent in private institutions and 27 percent in public institutions. Some 31,866 different undergraduate programs were offered by 2,316 institutions (304 public and 2,112 private). Meanwhile, Brazil offers a total of 3,600 master's and PhD programs. In 2012, out of 200,000 graduate students, 93.4 percent studied in public universities. More than 12,000 PhD's and 41,000 master's degree certificates were awarded in 2010.

The enrollment capacity of public institutions is limited by their high per-student cost and dependence on federal or state funds. Generally, few applicants to public higher education are accepted (only 11 percent of the total). Success is strongly linked to family circumstances (i.e., parents with tertiary education) and access to high-quality secondary

education (frequently private). Thus, students from wealthier families have advantages over those from poor backgrounds, who end up attending less-selective and less-rigorous private institutions.

Many research universities have an extremely competitive selection process as well as a *numerus clausus*. For example, the 2014 *vestibular* at the University of Campinas (Unicamp), one of the more important public research universities, had approximately 73,000 candidates for just over 3,300 vacancies.

Overall, the higher education system has witnessed unprecedented growth, with enrollments doubling in the last 10 years. From 2011 to 2012, enrollment increased by 4.4 percent, while the number of freshmen increased 17 percent (from 2.3 to 2.7 million students). The number of graduates is around 1 million per year, indicating a rather high dropout rate. Although the numbers seem impressive, only 15 percent of 18- to 24-year-olds are currently enrolled in an undergraduate program. If growth continues at the 2012 rate, the cohort enrollment will only reach the OECD average of 34 percent, in 2022.

## Making Sense of Quality

Brazil has separate systems for quality assessment at the undergraduate and graduate levels. The National System of Higher Education Evaluation (SINAES) evaluates undergraduate education, including a test for assessing learning outcomes called the National Exam of Student Performance (ENADE). Graduate programs are evaluated by the national Graduate Education Agency (CAPES).

SINAES bases its evaluation on three assessments—institutional, program, and undergraduate student proficiency evaluation. The ENADE exam, taken by graduating students, assesses proficiency on topics determined by the National Curricular Authority for Undergraduate Programs. Institution and program evaluation are based on data collected by the Ministry of Education and on self-evaluations conducted by the institutions. A full assessment cycle is completed every three years. Despite limitations and issues of validity, the system aggregates data from institutions, grouped according to various criteria, and provides useful information.

The graduate system encourages good-quality research, both in quantitative and qualitative terms. The expansion of research is evidenced by the number of published articles in ISI Web of Science indexed journals, which has increased by 18 percent in the last few years. In 2009, Brazil was ranked 13th globally for the number of articles in this database (32,100 articles), which represents 2.7 percent of the articles produced in the world. These figures are notable, considering that only 1.1 percent of Brazil's GDP is currently spent on science and technology, a low percentage compared to other developed or developing countries. Much of the country's research success, particularly in the fields of biofuels, agriculture, and aviation, can be attributed to sustained investment in public research universities, graduate education, and research institutes.

> ***Brazil has an unusual postsecondary educational system, with a relatively small number of public (federal, state, or municipality) research universities (completely tuition free), and a large number of private institutions.***

## Future Developments

Although an integrated and diversified system of higher education in Brazil is still far from reality, important trends are slowly changing the country's higher education landscape. Notably, three-year technical/vocational programs—(both public and private) that focus on training in areas and subjects not offered by traditional academic institutions—have grown significantly in the last few years. For example, enrollment in the Federal Institutes of Education, Science and Technology (IFETs) increased from about 31,000 to 101,600 between 2006 and 2011. The public technical colleges of the State of São Paulo (known as FATECs) saw enrollment grow from 10,000 to 20,000 from 2001 to 2011.

There has also been substantial growth in undergraduate distance programs. Enrollment increased from 5,000 in 2001 to 1,113,850 in 2012, accounting for 15.8 percent of undergraduate enrollment. Most of the enrollment in distance education is in the private sector (83.7 percent in 2012).

## Conclusion

The demand for postsecondary education in Brazil has grown significantly as a result of such factors as improved educational attainment at other levels of the educational system; a growing perception (particularly among the middle and lower classes) that higher education is an important element of social advancement; and the introduction in recent years of affirmative action programs in public universities that reserve places for underrepresented social and ethnic groups, as well as graduates of public high schools. All signs point to continued growth in demand for higher education in the

coming years.

Brazil will likely see continued strengthening of the quality and range of program offerings at all of its institutions. This will involve further internationalization of its universities and a gradual increase in the number of distance learning programs. The Brazilian government, the private sector, non-Brazilian partner universities in the United States and elsewhere, and nonprofit organizations of various stripes will all play crucial roles in the advancement of the country's higher education system.

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*Note*: Most statistics are drawn from the Higher Education Census, INEP/Ministry of Education (see '*Censo da educação superior,*' http://portal.inep.gov.br/web/censo-da-educacao-superior/resumos-tecnicos).

# Brazil: Student and Scholar Mobility

**Maria Krane**

President Dilma Rousseff's announcement that the Brazil Scientific Mobility Program (BSMP—formerly Science Without Borders) would make 101,000 scholarships available to Brazilians, for study and research abroad, captured the attention of the world in 2011. Her bold decision signaled the Brazilian government's intention to internationalize its universities and fuel the country's development by accelerating an already growing mobility trend between Brazil and other countries, especially the United States.

## Mobility by the Numbers

*Brazilian students abroad.* The year before the BSMP was launched, 9,029 Brazilians were enrolled in US universities, an increase of 2.9 percent from the previous year and 65 percent from 1995–1996 (IIE 2013). With the start of the BSMP, the number of Brazilians studying on campuses across the United States jumped to 10,868, a growth of 20.4 percent from the previous year, making Brazil the 11th top country of origin for foreign students in the United States.

*International students in Brazil.* According to *Open Doors 2013*, Brazil was 14th among the most popular study-abroad destinations for American students, hosting a total of 4,060 US students (IIE 2013)—almost 10 times the number of students from the United States who studied in Brazil in 1995. The number of students coming to Brazil from other countries is increasing, as well. For example, the number of Colombian students in Brazil grew from 972 in 2011 to 1,333 in 2012. Other countries of origin are Portugal, France, and Angola.

*Scholar mobility.* Limited data are available to measure the mobility of scholars between Brazil and the United States, as well as between Brazil and other countries of the world. According to *Open Doors* (IIE 2013), US universities reported a total of 2,627 scholars from Brazil (the leading Latin American country of origin) on their campuses in 2011–2012, an increase of almost 20 percent over the previous year. The presence of scholars from different nations in Brazil has not been recorded. Through BSMP, however, scholar mobility will be more easily measured, as the program will give impetus to inbound mobility by funding scientists from various countries to come to Brazil to conduct research. Over the life of the program, 390 "special visiting researchers" will be in Brazil at least one month per year for a period of three years or longer, and 860 "talented young scientists" will spend up to three years in Brazil.

## Challenges to Mobility

*Language issues.* Brazilians have recently been ranked 38th in the world among countries with "low proficiency" in English. This is not surprising, given the fact that in Brazil the old grammar-translation method of teaching is still prevalent in schools, and teachers lack training in communicative approaches to foreign-language learning. Low English proficiency can make it difficult for Brazilian students to enroll and succeed in institutions abroad.

> *To address the issue of cost and make study abroad more affordable, bilateral or multilateral exchange programs facilitate the mobility of students between two institutions or among several institutions within a consortium.*

At the same time, few US students attain sufficient proficiency in Portuguese to study at Brazilian universities. Of the 4,634 institutions of higher learning in the United States, only 30 offer a Portuguese major. Overall, the 2009 enrollment in Portuguese-language classes in the United States was 11,371; in spite of modest enrollment gains in recent years, the number of Portuguese learners continues to be a small fraction of the number of Spanish learners—864,986.

*Cost.* The cost of US higher education continues to climb, and many students in the United States rely on scholarships,

loans, and other financial aid, which may not cover a study abroad experience—in Brazil or anywhere else. Conversely, Brazilians pay no tuition to attend public higher education institutions in the country; so, study abroad is an extra expense. Rising tuition rates in the United States are certainly a potential deterrent to mobility, particularly for students who do not receive BSMP or other scholarships.

*Scholar preparation and support*. Studies focusing on the mobility of US and Brazilian scholars have shown their insularity as compared to their peers in other areas of the world. Many lack fluency in a foreign language and are reluctant to venture abroad—due to concerns about their careers, families, and expenses (both at home and abroad). According to interviews with two Fulbright scholars—a Brazilian who is currently teaching at New York University and a US faculty member who conducted research at the Universidade Federal da Bahia in 2011—their international experience is primarily for their own satisfaction. Both scholars expressed frustration that their home universities' incentives for participation in international experiences have been indirect and minimal; in their eyes, the publications resulting from their work abroad were their only "rewards" in terms of recognition and potential career advancement.

## Making Greater Mobility Possible

*Interinstitutional initiatives*. A variety of models at the institution level is emerging to facilitate greater mobility. To address the issue of cost and make study abroad more affordable, bilateral or multilateral exchange programs facilitate the mobility of students between two institutions or among several institutions within a consortium. Among the multilateral exchanges, the International Student Exchange Program (ISEP) stands out as a model for consortia. Besides giving students from member institutions the opportunity of studying for a semester or year at any one of the 300 ISEP institutions in 50 countries, the consortium offers them a support system on each campus and allows students to pay tuition, fees, room, and board to their home campus and receive the equivalent at their host institution.

Another model that is gaining traction is dual degree programs that bring Brazilian students to partner institutions in order to complete degree requirements. Recent examples of such programs are the partnerships between Rice University and the Universidade Estadual de Campinas, Brazil, for a joint PhD in history; Sciences Po of Paris and the Escola de Administração de Empresas de São Paulo da Fundação Getulio Vargas (EAESP-FGV) for a dual master of science degree in international relations, management, and international business.

*Government initiatives*. In 2011, the same year President Rousseff launched the BSMP program, President Obama announced the "100,000 Strong in the Americas" initiative to increase student exchanges between institutions in the United States and Latin America and the Caribbean. To make "100,000 Strong in the Americas" financially possible for students, the project counts on institutional collaboration among universities, governments, and the private sector.

On the Brazilian end, a key player is CAPES (Coordination for the Improvement of Higher Education Personnel), a foundation linked to Brazil's Ministry of Education and Culture. CAPES coordinates the BSMP application process and selection of awardees and administers other programs designed to reduce the challenges to mobility and foster international academic cooperation. To address the language-proficiency issue, for example, CAPES is sending hundreds of high school English teachers to the United States for a professional development program, to improve their teaching skills. CAPES is also selecting 45 Brazilian professors of Portuguese who will help develop, during a nine-month period, the teaching of Portuguese in US universities and strengthen relations between the two countries.

*Another model that is gaining traction is dual degree programs that bring Brazilian students to partner institutions in order to complete degree requirements.*

Other CAPES programs that focus on international academic cooperation include the NEXUS Program (Brazil-US Fulbright Program-Nexus of Regional Networks for Applied Research) and BRAGECRIM (*Iniciativa Brasil-Alemanha para Pesquisa Colaborativa em Tecnologia de Manufatura*—in English, the Brazil-Germany Initiative for Collaborative Research in Manufacturing Technology). In partnership with the Fulbright Commission, CAPES will coordinate the selection of Brazilian researchers in the area of sustainable energy and climate change to work with colleagues from the United States, other countries in the Americas, and the Caribbean as part of the 2014–2016 NEXUS Program. Through the BRAGECRIM program, German and Brazilian groups will work on projects

leading to innovative solutions for enhanced industrial productivity, quality, and sustainability.

### Future Trends

Past data on US-Brazil mobility indicate significant gains, even prior to the launching of such initiatives as Brazil's Scientific Mobility Program and 100,000 Strong in the Americas. With these programs now fully operational, it is not difficult to predict a surge in the mobility of Brazilian students and scholars.

The first contingent of Brazilian scholarship holders—23,000 who studied in 39 countries—already returned home. Press interviews with 52 of the returned students and researchers provide the best predictor of increased mobility: Besides opening their eyes to cutting-edge research and scholarship, the experience made them eager to continue to interact with the world (Borges 2013). This new generation of mobile Brazilians will be well positioned to help internationalize the country's universities and bring these institutions from the fringes to the center of global education.

## Collaboration Between Brazilian and US Institutions: The Time Is Ripe

**Rita Moriconi**

Brazil and the United States share many similarities that make the countries natural partners for collaboration in a number of areas, including in higher education. Brazil and the United States are both nations of continental proportion with immense regional differences; both are democratic powers with shared goals and values; and both value investment in science, technology, and research and development.

### A History of Engagement

US and Brazilian universities already have a history of higher education partnerships, many of which have been focused in the fields of science, technology, engineering, and mathematics (STEM). For example, in the 1950s the Brazilian government invested in bringing scholars from the Massachusetts Institute of Technology to teach at the Brazilian aeronautics university. A fruit of this exchange was the creation of Brazil's aviation company, EMBRAER, a multibillion dollar enterprise that produces aircraft for companies around the world—including the US military.

More recently, the US and Brazilian governments have established several formal agreements and programs to further increase collaboration. The 1997 Memorandum of Understanding on Education—relaunched in 2010 and reaffirmed in 2011 under the US-Brazil Global Partnership Dialogue—is one of them. Another is the 2008 Joint Action Plan to Eliminate Racial and Ethnic Discrimination and Promote Equality. Focusing on student mobility, in 2011, President Obama announced, the "100,000 Strong in the Americas" presidential initiative, aimed at encouraging 100,000 students from Latin America and the Caribbean to study in the United States and 100,000 US students to study in Latin America and the Caribbean by 2020.

### A New Level of Commitment

While all of these programs have strengthened ties between Brazil and the United States, Brazilian President Dilma Rousseff's launch of the Brazilian Scientific Mobility Program (BSMP) in July 2011 signaled a new level of commitment to deeper engagement between Brazil and the rest of the world, including (though not limited to) the United States.

Although BSMP's primary focus is mobility, its long-term goals are broader; it is hoped that by building on the connections established by individual students and scholars, increased mobility will lead to institutional partnerships that endure beyond the program itself and encompass an array of collaborative activities. The intended result is greater internationalization of Brazilian higher education institutions, research centers, and curricula.

In order to accomplish its mobility goals, BSMP requires the involvement of a number of organizations and institutions, so in this sense it is already fostering collaboration. In the United States, the Institute of International Education (IIE) and LASPAU–Academic Programs and Professional Programs for the Americas, with the help of the Fulbright Commissions and EducationUSA, have assisted Brazilian counterparts with making sense of their options for student placement in US institutions. Later, a community college consortium established by Northern Virginia Community College, and the Historically Black Colleges and Universities' (HBCU) association, signed separate agreements with the Brazilian government to receive Brazilian students under the BSMP.

### More Pathways for Collaboration

In addition to the direct partnerships involved in the program, BSMP has heightened interest in higher education collaborations of different types between the United States and Brazil. Government officials and agencies in both countries—notably, EducationUSA and the US Department of Commerce, the US Mission in Brazil, and the Fulbright Commission, as well as CAPES (Coordination for the Improvement of Higher Education Personnel, a foundation within the Brazilian Ministry of

Education) and CNPq (the National Council for Scientific and Technological Development, a unit within Brazil's Ministry of Science and Technology)—have been actively involved in these efforts. In 2013, for example, the US Embassy in Brasilia worked with the White House representative on HBCUs to bring several HBCU groups to Brazil to explore partnership opportunities.

> *Brazilian President Dilma Rousseff's launch of the Brazilian Scientific Mobility Program (BSMP) in July 2011 signaled a new level of commitment to deeper engagement between Brazil and the rest of the world.*

Higher education associations and other organizations are also establishing collaborations. The Brazilian Association of State Universities (ABRUEN) and its counterpart in the United States, the American Association of State Colleges and Universities (AASCU), have joined forces to promote student exchanges between member universities of the two organizations and are considering the possibility of a joint-degree program based on a similar AASCU initiative in China. On the US end, connections have also been initiated at the state level. Three delegations of representatives from institutions in Georgia, for example, have visited six cities in Brazil with the goal of fostering partnerships. Some of the HBCUs that participated established ties with similar institutions in Brazil, such as Zumbi dos Palmares, as well as with Afro-Brazilian associations.

An interesting recent development at the institution level is the creation of small offices that serve as outposts of their home institutions in the United States. Examples include the Columbia Global Center in Rio de Janeiro, the Harvard Rockefeller Center, University of Southern California in São Paulo, Kent State in Curitiba, and others. These offices can play a key role in facilitating various types of collaborations, particularly among faculty. The Columbia Global Center in Rio, for instance, inaugurated its office with a week of workshops and other events that included Columbia's president and 18 deans from public health, public policy, Latin American Studies, business, education, and other fields, as well as the mayor of Rio de Janeiro. Since then, Columbia faculty in a wide range of disciplines have been coming to Brazil to work with their Brazilian counterparts, as well as government officials.

## Practical Considerations for US Universities

US universities interested in developing partnerships with Brazilian institutions should consider different approaches, depending on their specific goals and interests.

*To engage with the BSMP program.* Here, the wisest advice is to engage with the facilitating organizations responsible for placing BSMP students in the United States—IIE for BSMP's one-year undergraduate study-abroad program and the various professional master's opportunities; LASPAU for the four-year PhD program. In tandem, an excellent way to establish ties for your institution is to have faculty delegations visit Brazil and engage directly with STEM faculty. Finally, consider connecting with EducationUSA advising offices in Brazil to explore options for using webinars to address prospective BSMP students.

*To increase the number of partnerships with Brazilian universities outside the BSMP program.* You will be cherished by Brazilian university officials, especially those inside international offices, if you do not mention BSMP every time you visit. Brazilian universities are more interested in establishing long-term partnerships that will result in true student mobility between the two countries—i.e., both sending Brazilian students *and* receiving US students on their campuses. Working with your study-abroad office to establish two-way programming will give you a strong head start in establishing these partnerships, as will taking advantage of your admissions representatives to also wear a study-abroad hat, and working with prospective universities to pass on information about possible strong partners.

> *Brazilian universities are more interested in establishing long-term partnerships that will result in true student mobility between the two countries—i.e., both sending Brazilian students and receiving US students on their campuses.*

US universities should also consider participating in the FAUBAI, a Brazilian NAFSA-like conference. Other smart partnership development strategies include working with state consortia or other US associations (such as those noted above)

to organize visits to Brazil, and joining EducationUSA Fairs and matchmaking events. To identify potential research partners, US universities should consider using various Brazilian agency Web sites, such as "Finding partners in Brazil" and "Opportunities for individuals from abroad" (Ministry of Science, Technology and Innovation, n.d.a and n.d.b).

### Focus on Rapport

Take your time in building a relationship with Brazilian counterparts. Experience shows that engagement between US and Brazilian universities can be challenged by issues of poor communication, limited resources and infrastructure, lack of language skills, credit transfer issues, limited knowledge in the United States regarding the strengths of Brazilian institutions, etc. In terms of cultural differences, US universities often seem to approach Brazilian universities first to gather factual information and then to establish rapport and possibly a future partnership. Brazilian universities' representatives want to build rapport first and then share details with future partners. More visits on both sides will help alleviate any mistrust and establish ties.

The moment is ripe to establish, expand, and strengthen educational partnerships between universities in Brazil and the United States. There is a meaningful history of engagement, and new initiatives, such as the BSMP, provide an unprecedented opportunity to begin a relationship with Brazilian institutions and ultimately establish long-term partnerships.

## Chile: An Overview

**Andrés Bernasconi**

Though feeble roots were established during the colonial period, higher education in Chile began in earnest when the University of Chile, a public institution, was founded in 1842. For most of its trajectory since, Chilean higher education remained a rather small system. As of 1980, it included two public universities based in Santiago, the capital city, with regional branch campuses throughout the country, three Catholic universities, and three private universities organized by local elites in the provinces. There existed, also, a largely unregulated vocational sector comprised of both public and private institutions, which was not considered part of higher education.

### The Current Structure

The present day configuration of the system was initially drawn at the beginning of the 1980s by the Pinochet regime that ousted Salvador Allende in the 1973 coup. With the intention of expanding enrollments, differentiating the higher education system, and bolstering competition, an administrative process was designed to create new private universities and nonuniversity tertiary level institutions—called "professional institutes" (offering undergraduate education in applied professional fields) and "technical training centers" (offering two-year technical and vocational programs). Further, the regional colleges of the University of Chile and the State Technical University (now, University of Santiago) were transformed into 14 small, independent public universities. By 2000, the number of institutions had expanded to 64 universities (only 16 of them public), 60 professional institutes, and 116 technical training centers, all of them private. Total enrollment was 450,000, with over 70 percent of students attending private institutions.

> *The last few years have seen an effort to expand graduate education, with increased funding for slots both in Chile and abroad.*

A legacy of these reforms is the distinction made in Chile between universities predating the 1980–1990 expansion, and those created as a result of it. The former, conventionally referred to as "traditional universities," are members of Chile's Council of Rectors, an advisory board to the Minister of Education, while the latter are not. It gets more complicated, though; the Council of Rectors includes not only the 8 universities created prior to 1980 but also 17 other newer universities—the 14 former branches of the University of Chile and the University of Santiago and three now-independent former branches of the Pontifical Catholic University of Chile. These are also considered "traditional." The rest are "privates."

### Funding

The funding scheme for higher education in Chile was also redesigned in 1981. Public financial support decreased, and universities were required to cover a growing portion of their costs by collecting tuition at levels as close as possible to actual unit cost. A subsidized public loan program was created to assist students unable to make the tuition payments. Finally, a National Fund for Scientific and Technological Research (FONDECYT, by its Spanish acronym) was set up in 1982 to distribute research funding to individual researchers on a competitive, peer-review basis.

New private universities were to be funded entirely through tuition revenues; only since 2006 do their students have access to the state-supported subsidized loan program and to some government scholarships. Also since 2006, these institutions are allowed to compete for research funding and to present proposals for government grants to foster innovation and development in higher education.

## Enrollment

There are now 1,130,000 students enrolled in Chilean higher education, which amounts to a gross enrollment rate of 55 percent, among the highest in Latin America. The number of institutions has decreased somewhat from a record high of close to 300 in 1990, but not the private dominance in number of institutions and in enrollments. About half of all students receive government financial aid in the form of tuition scholarships or loans, still insufficient for a country second only to the United States in cost of tuition as a proportion of family income. Overall, private sources represent over 60 percent of funding for the system, whereas public moneys account for less than 40 percent.

The last few years have seen an effort to expand graduate education, with increased funding for slots both in Chile and abroad. An ambitious program of scholarships for graduate study abroad was inaugurated in 2008, and currently sponsors some 5,000 students pursuing master's or doctoral degrees across the globe. Including both graduate students in Chile and those studying abroad (self-funded, supported by the Chilean government, or receiving financial assistance from non-Chilean sources), there are some 60,000 Chileans pursuing higher degrees.

## Faculty

Despite the increasing number of graduate students, the stock of highly trained scholars and professionals in Chile is still small; the estimated number of PhD holders in the country hovers around 8,000, with the vast majority working in universities and the rest divided among government and the private sector. As a result, among the over 60,000 academics in universities, only 14 percent have a PhD degree. If one considers only full-time professors in universities (20 percent of the whole university professoriate), the proportion with doctorates rises to one-third.

There are two main reasons for the relatively high prevalence of part-time faculty. One is a result of the main function of the system, which is not to provide a general humanistic or scientific education, but to educate professionals, who obtain a license to practice directly from the university. Hence, much of the professoriate consists of practicing professionals. Second, universities funded solely through tuition (the privates) or mostly through tuition (the state, Catholic, and older private universities) cannot afford to hire more full-time staff than they currently have. These conditions are even more prevalent in professional institutions and technical training centers.

> *Improving the efficacy and efficiency of the system will require greater emphasis on teaching methods, increased curriculum flexibility, more credit transfer opportunities, and enhanced sensitivity to the needs of students who also work.*

## A Vision for the Future

Chile's higher education system will likely continue to improve in terms of quality and diversity of institutions, students, and outcomes. The rate of growth in enrollments, however, will probably abate somewhat, due to demographic trends as well as economic limitations. In addition, there are some important challenges for the system as a whole going forward.

First, expansion has created more opportunities for access but, along with them, greater difficulty in retaining and graduating an increasingly diverse student body. On average, university students take over six years to graduate, and only about half of them actually graduate at all. Improving the efficacy and efficiency of the system will require greater emphasis on teaching methods, increased curriculum flexibility, more credit transfer opportunities, and enhanced sensitivity to the needs of students who also work.

Second, although Chile's researchers are the most productive in the region as measured by papers per capita or per dollar invested in research and development, the size of the research enterprise is still small, and wholly dependent on universities, with very limited contribution from the private sector. Further expansion will require additional financial support from public and private sources, as well as an increase in the number of doctorate holders available as research personnel.

Third, accreditation of institutions and degree programs, which begun in Chile in 1990, making Chile a pioneer in the region, is currently undergoing a crisis of legitimacy—as a result of the perception that it became too lenient and therefore allows for poor quality institutions to be accredited. This is

indeed paradoxical, given that Chile has been, with El Salvador and Ecuador, one of the few countries in Latin America to actually close private universities due to poor quality, after an initial period of explosive growth in the private sector. Following a case of alleged corruption by one of the members of the National Accreditation Commission, the whole quality-assurance framework is now undergoing a revision.

Finally, affordability is as much a concern in Chile as it is in the United States. Much of what caused the student protests of 2011 derives from loan exhaustion. Proposals to return to free tuition and to expand the size and quality of the public sector of higher education are being entertained in the policy arena but, regardless of their viability, the issue of who pays for what is very much in public debate these days.

## International Academic Mobility in Chile

**Nuria Alsina**

Chile has a long-standing tradition of promoting academic internationalization, particularly through mobility of students and faculty. Fostering internationalization—supported in various ways by the Chilean government—has been seen as a key means to facilitate the academic development of the university system, which, in turn, is viewed as a principal driver of economic development in the country. The Chilean government has been motivated to develop the country's human resources to the highest level through access to top institutions around the world.

### Chilean Students Abroad

*Graduate students.* Becas Chile is a scholarship program that supports full-degree doctoral studies in the world's best institutions. The government spends US$100 million annually on this program; in the period 2008 to 2012, 1,684 PhD scholarships were awarded.

Scholarship recipients have tended to come from the social sciences (representing 42.6 percent of the awards given out), followed by the natural sciences (22 percent), and, to a lesser extent, the humanities (13.2 percent), engineering and technology (10.6 percent), medical and human sciences (7 percent), and agricultural sciences (4.8 percent).

The United States has been the third most popular destination country for Becas Chile scholarship holders—20.6 percent of the awardees have chosen to spend their time abroad in the United States, just behind Spain (22.2 percent of awardees), and the United Kingdom (20.8 percent).

In the period 2008 to 2012, Becas Chile also awarded 2,159 scholarships to students pursuing master's degrees abroad. The United States is the second most popular destination for this group, receiving 25.3 percent of these students. Universities in the United Kingdom enrolled the most (28.8 percent of these scholarship recipients). Australia (receiving 19.5 percent) and Spain (15.2 percent) were other popular destination countries.

In addition to funding provided by their home country government, Chilean graduate students abroad also benefit from other opportunities and sources of support, including from foreign national agencies, binational organizations, and the institutions at which they enroll. Double degrees are also gaining in popularity.

*Undergraduate students.* Increasing numbers of Chilean undergraduates are studying abroad, but support is still limited and most participate in short-term (often one-semester) exchange programs, rather than pursuing degree programs abroad. The Chilean government sponsors just a few specific programs at the undergraduate level, all oriented toward special purposes, such as training for teachers of English. From 2009 to 2011, for example, 360 students focused on pedagogy in English received state scholarships to spend one semester abroad. Just over half of those students opted to study in the United States.

*Fostering internationalization—supported in various ways by the Chilean government—has been seen as a key means to facilitate the academic development of the university system, which, in turn, is viewed as a principal driver of economic development in the country.*

In addition, a small number of scholarships provided by several German and Japan universities, as well as the Government of Canada, foster mobility to these countries. However, the limited number of scholarships (which do not always cover all costs), and some language requirement challenges, present obstacles to increasing Chilean undergraduate mobility.

## Foreign Students in Chile

*Foreign graduate students.* Chile has a long tradition of training foreign graduate students from other parts of Latin America. These students are attracted by the reputations of some of Chile's oldest and most prestigious universities, as well as some special scholarship programs created by the Chilean government. The Organization of American States and the Inter-American Development Bank also provide scholarships to Latin American students in graduate programs in Chile. Some Chilean universities provide matching funds for these programs, contributing tuition waivers of up to 50 percent.

Altogether, almost 3,000 students from 10 different Latin American countries are currently pursuing graduate studies in Chile (IIE/Ministry of Education Chile 2013). Students from Colombia, Peru, Ecuador, Bolivia, Argentina, Mexico, and Venezuela are heavily represented in this group. The most popular areas of study for these students in Chile include business administration (specifically, the master of business administration degree), economics, agriculture, social sciences, engineering, and urban studies among others (IIE/Ministry of Education Chile 2013). Very few foreign students from outside of Latin America pursue full graduate degrees in Chile, but those who do so study in areas in which Chile has competitive advantages, such as astrophysics, marine sciences, political science, and economics.

*Foreign undergraduate students.* Across much of Latin America, undergraduate studies (in public institutions) are free, but not in Chile. Thus, Chile is a comparatively expensive option for undergraduate degree study, and students from the region who can afford the tuition often prefer to study in the United States or Canada if they go abroad. Nevertheless, at present more than 6,000 Latin American students from 10 different countries are pursuing undergraduate degrees in Chile, largely originating from Peru, Ecuador, Argentina, Colombia, Bolivia, and Brazil. Popular fields of study for foreign students in Chile include business and management, the health professions, social sciences, and engineering, among others. Although there are no official data, the number of non-Latin American undergraduate students coming to Chile to pursue undergraduate degrees appears to be negligible.

Aside from degree-seekers, since 1990 the country has seen an explosive increase in the number of foreign students coming for short-term semester abroad experiences. Many are attracted to Chile by high-quality Spanish language programs, the opportunity to study Chile's fascinating transition to democracy, and strong programs in economics, political science, and literature. Special extracurricular activities, tutorial programs, and other support services help these students integrate smoothly.

In recent years, some of the largest exchange programs in various Chilean universities are estimated to have hosted 3,500–4,000 students a year. US universities provide the great majority of exchange students to Chile—about 60 percent of the total—although exchange students from Germany, Spain, France, and the United Kingdom, and indeed 40 different countries (including from Asia and Latin America), are also present.

> *Since 1997, technical and economic support to promote the Chilean university system abroad has been provided by the Trade Commission of Chile (ProChile), a division within the Ministry of Foreign Affairs, with more than 15 regional offices and 54 commercial offices around the world.*

## Scholar Mobility

The Chilean government provided 135 scholarships for postdoctoral activities abroad during the period 2008 to 2012. The majority of recipients (41.5 percent) have opted to pursue opportunities in the United States. Smaller numbers have undertaken their postdoctoral work in the United Kingdom (15.5 percent), Spain (14.8 percent), France (12.6 percent), and Canada (10.7 percent). These statistics do not reflect the numbers of Chilean postdocs who obtain their support from a host university abroad, rather than from the government of Chile.

In terms of support for collaborative international scholarly activity, approximately 40 percent of the research projects approved by the most important national fund, the Chilean National Science and Technology Research Fund (FONDECYT), involve international partners. Between 2008 and 2012, 9,003 FONDECYT projects received budget moneys to foster international participation, and 6,319 scholars are reported to have visited Chile under this framework. Visitors from the United States accounted for 14 percent of the total, though visitors from over 60 countries were involved in these projects.

The Fulbright Commission in Chile is another notable actor in terms of scholar mobility. With its mission to promote academic exchange with the United States, the Commission provides support for 17 scholars and 16 senior specialists from the United States to spend time at Chilean universities. Similarly, the German Academic Exchange Service (DAAD), the British Council, the Japan Cooperation Agency, and the embassies of France and China, among others, foster collaboration between Chile and their respective countries by offering different study opportunities for faculty and other scholars.

### More Mobility on the Horizon

It is clear that Chile is keen to attract international partners and to foster mobility. Since 1997, technical and economic support to promote the Chilean university system abroad has been provided by the Trade Commission of Chile (ProChile), a division within the Ministry of Foreign Affairs, with more than 15 regional offices and 54 commercial offices around the world. ProChile has undertaken missions across Latin America to foster collaboration with universities and to showcase undergraduate and graduate programs in Chile; organized seminars and conferences; and supported Chilean university attendance at international academic fairs and conferences (such as NAFSA and EAIE).

> *The Chilean government provided 135 scholarships for postdoctoral activities abroad during the period 2008 to 2012.*

All signs indicate that mobility between Chile and other countries will increase. Many universities are incorporating mobility objectives into their institutional goals; the government is committed to supporting graduate training abroad, and the Chilean academic community values ongoing efforts to internationalize.

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*Note*: Unless otherwise noted, most statistics are drawn from CONICYT, Chile's National Commission for Scientific and Technological Research (in Spanish, *Comisión Nacional de Investigación Científica y Tecnológica*).

## US-Chilean University Partnerships: Why Is Chile a Model for the Future?

**Ned Strong**

In Latin America, Chile is emerging as a leader in academic exchanges and collaborations. In addition to a growing portfolio of traditional student and faculty exchange, Chile has a strong university system, a notable ease of doing business, emerging financial resources, and an environment that encourages innovation. These advantages have fostered new models for collaboration that have far-reaching impact well beyond Chile's borders.

### Traditional Programs: A Growth Industry

Chile is experiencing phenomenal growth in the area of traditional student and faculty exchanges. Chile's English-language newspaper, the *Santiago Times*, recently reported that the number of international students in Chile had grown 700 percent in the last decade. *Pro Chile*, a component of the Chilean government's export promotion efforts, reported a total of 12,383 international students in the country in 2012.

The number of Chilean students who study abroad is also growing. Since its inception in 2008, the Chilean Government's *Becas Chile* program has provided scholarships for 3,449 students for graduate education around the globe, more than three times the total number who studied abroad during the previous five years. Chilean students enrolled in US universities (funded by *Becas Chile* as well as other sources) increased from 2,203 in 2011–2012 to 2,349 in 2012–2013, a 6.6 percent increase (IIE 2013).

The American-Chilean Chamber of Commerce has also noted an increase in educational exchange activities in Chile, especially the emergence of dual degree master of business administration programs. The University of California, Los Angeles and Universidad Adolfo Ibañez, Babson College and the Universidad del Desarrollo, and Tulane and Universidad de Chile are examples. University of Notre Dame and Pontificia Universidad Católica de Chile are establishing a joint degree in engineering.

### New Models for Collaboration

Beyond traditional exchanges, many universities in the United States and other countries are developing new and innovative program models that take advantage of Chile's unique environment and build ties with the local scholarly and business communities. Such models include:

*Regional offices.* Ten years ago Harvard University opened a regional office in Chile, in order to link the institution more closely with Argentina, Peru, Bolivia, Chile, and Uruguay. Its mandate was not limited to creating study-abroad programs, which was the model for many offices of US universities in Chile at the time, but encompassed an array of entrepreneurial activities that would "bring Harvard to Latin America and bring Latin America to Harvard." To date, more than 100 faculty members and 1,000 students have participated in activities initiated by the office, which have included collaborations with nearly one-third of all Chilean universities.

Building on Harvard's success, in the last two years, Columbia University and the Massachusetts Institute of Technology (MIT) have leveraged their strong alumni and programmatic bases in Chile to develop similar offices with like mandates. The University of Notre Dame is also expanding its presence in Chile beyond student exchanges, and the dean of the Division of the Physical Sciences at the University of Chicago was in Chile recently to explore similar opportunities. The value of the regional office model is the potential for deep connections and innovative programs that bring together top scholars, across disciplinary and geographic borders, to address some of the most difficult world programs.

*University-Community Collaborations*. In 2006, when Chile's president, Michelle Bachelet, announced the improvement of preschool education as a key priority for her government, faculty from Harvard's Graduate School of Education and Chilean colleagues established *Un Buen Comienzo*, a program to improve preschool learning and health outcomes. Harvard faculty members and graduate students have worked with Chilean colleagues to improve the classroom practices of hundreds of teachers in 80 public schools in Santiago and the Rancagua Region. In terms of broader impact, three Chilean universities are working with the *Fundación Educacional Oportunidad* to evaluate the program and expand it to new areas of Chile. Data collected as part of the program's comprehensive evaluation have contributed to at least 20 graduate school theses; and, based on its success, the model is being replicated in Brazil.

In a very different example of university-community collaborations, Harvard faculty and students in a number of disciplines, along with staff from the Chile office, joined local efforts to rebuild after the powerful 2010 earthquake and tsunami. Public policy students learned postdisaster intervention techniques, by working directly with local residents to produce disaster recovery plans for small businesses. Medical school faculty worked with local universities to address child and family health. Oceanography faculty worked to restore artisan shellfish production. Design school faculty worked with local architecture students on earthquake resistant buildings. Again, the impact of these collaborations went beyond the program itself; one participant went on to lead White House efforts to address losses resulting from Hurricane Sandy, and faculty involved in the program have applied lessons learned in disaster situations in Japan, New Zealand, and Haiti.

*Entrepreneurship and Innovation.* MIT established the worldwide MIT International Science and Technology Initiative (MISTI) in 2003. The largest and most active MISTI program is in Chile, where funding was recently awarded for 24 new collaborative projects, led by faculty and students. The program's chairman, Arnoldo Hax, has stated that MISTI partnerships in Chile are the strongest worldwide because of the country's robust spirit of entrepreneurship, and a commitment on the Chilean side to achieving success in each of the projects. Chile's MIT office works closely with the MISTI program and facilitates much of its work on the ground.

Over the past two decades, university collaborations have helped Chile become a regional leader in innovation. The Chile-California Agreement, begun in the 1960s, revolutionized fruit production and exports in Chile—thanks to collaborations between the University of California Davis and the Universidad de Chile. A similar agreement between Chile and Massachusetts was signed in October 2012 and has already resulted in new collaborative programs focusing on innovations in energy, biotechnology, and education.

In addition to encouraging innovation through institution-level programs, the Chilean government is also focused on individual entrepreneurs. *Start-up Chile*, a government program established in 2010, provides US$40,000 grants to recent graduates of universities all over the world who come to Chile to begin new ventures. By 2013, 888 entrepreneurs from 36 countries have been awarded grants. The program contributes to a growing venture capital culture and is expected to result in countless collaborations, technologies, patents, and products.

These examples show how unique approaches to local engagement—particularly via regional offices with an entrepreneurial focus—can connect faculty, students, and institutions to address pressing local needs. While the immediate effects of such projects are important, the broader impact is equally powerful. Faculty and students, from both the home university and local partner institutions, discover new techniques, establish new research areas, and contribute to the development of disciplines well beyond the borders of Chile.

### Why Chile?

With an annual growth rate of around 5 percent for the last 5 years, Chile has one of the strongest economies in Latin America. Significant growth in exports over the last 20 years has created wealth and increased the country's tax base, allowing for greater public and private investment in higher education and research. Now, some of the region's top universities are in Chile, providing a strong base for international collaborations, particularly in areas such as biology, astrophysics, agriculture, forestry, mining, and engineering.

On a logistical note, Chile ranks #1 in Latin America and the Caribbean on the World Bank's "ease of doing business" index, and entrepreneurial ventures are welcomed. Opening a representational office in Chile is a fairly straightforward proposition; unlike in neighboring countries, red tape is relatively minimal.

In many senses, Chile is a perfect student and faculty laboratory. A combination of willing and able university partners, the ease of doing business, and an environment of entrepreneurship create a strong foundation for successful collaborations. Establishing an office on the ground that can catalyze these programs and relationships leads to the advancement of disciplines, higher quality student experiences, and new opportunities for faculty involvement.

## Southern Cone Countries: Global Engagement Beyond the United States

**Leandro R. Tessler**

Argentina, Brazil, and Chile (ABC) have struggled to be part of the international higher education scene for many years. Some very recent developments have caught the attention of the United States, including the Program for Promotion of the Argentine University (PPUA) and its constant presence at international events since 2006; the Bicentennial Becas Chile program, operational since 2008; and Brazil's Scientific Mobility Program (BSMP, formerly "Science without Borders") launched in 2011. However, many important internationalization projects, involving mainly Europe and other parts of Latin America, have been in place for years. Indeed, the United States has not been the only—nor, up to now, even the most important—partner of many ABC higher education institutions.

### Understanding Internationalization

Although Brazil and the Spanish-speaking Latin American countries have rather different higher education histories, international influences have been a factor from the beginning. In the former Spanish colonies, universities were established in the 16th century and largely inspired by the models of Alacalá de Henares and Salamanca in Spain. At that time, these colonial institutions depended on receiving scholars from the metropole. They were the precursors of today's private and public universities across Spanish-speaking Latin America.

In Brazil, universities were established only in the 20th century. In 1934, the State of São Paulo commissioned a mission of French intellectuals to help create the first bona fide Brazilian university, the University of São Paulo. More recently, during the 1960s and 1970s, the ABC countries all suffered from military dictatorships, where civil rights were not guaranteed and academics were persecuted and even killed by governments supported by the US administration of the time. In this context a feeling of latinidad, or Latin brotherhood, among the ABC countries (and the rest of Latin America) flourished, especially in universities' humanities departments. The universities became the places where a genuine Latin American culture was to be forged. Latin America would finally be able to end its relationship of dependence on the richer northern hemisphere countries.

In this context, it is not surprising that cooperation within Latin American universities grew with a strong political component. For example, local university leaders maintained strong sympathy for French universities and the outcomes of the May of 1968 movement. In many cases, the use of the English language by intellectuals was (and, for some sectors, still is) associated with submission and giving up national sovereignty, posing a barrier for cooperation with the United States even today.

During this same period, local scientific agencies (CONICET in Argentina, CNPq and CAPES in Brazil, CONICYT in Chile) were focused on providing scholarships for their own students to pursue doctoral-level study all over the world. Europe, especially Spain (for Argentina and Chile) and France (for Brazil) were popular destinations. Once a critical mass of researchers was reached, the funding agencies switched priority to supporting PhD students almost only in domestic institutions, with the goal of consolidating graduate programs at home.

### Intra-ABC/Latin America Internationalization

Internationalization of higher education returned to the political agenda in the ABC region with the creation of Mer-

cosur in 1991. The Associación de Universidades Grupo de Montevideo (AUGM) was established in the same year to bring together selected public universities within the member countries. AUGM currently has 11 members in Argentina, 2 in Bolivia, 10 in Brazil, 2 in Chile, 3 in Paraguay, and 1 in Uruguay. AUGM promotes student mobility among its member universities, both at undergraduate and graduate levels, as well as faculty mobility, and scientific and academic cooperation. Every year, one member university hosts the Young Researchers Meeting, which brings together more than 1,500 undergraduate students involved in research projects. AUGM is a model for successful cooperation between universities in the area.

Other associations like the Chilean Interuniversity Center for Development (CINDA) and Brazilian Universities Coimbra Group (GCUB) have programs to facilitate student and faculty mobility within the region. GCUB has established BRAMEX (Brazil-Mexico) and BRACOL (Brazil-Colombia) programs to exchange graduate students and is currently negotiating a similar initiative with Peru. It also runs a program that annually sends up to 280 Brazilian undergraduate students to Portuguese universities for a year of study.

Although the exact figures are impossible to obtain, there is relative "free mover" circulation of undergraduate and graduate students within the ABC countries. Public universities in Argentina (at the undergraduate level) and Brazil do not charge tuition fees. Portuguese and Spanish are close enough to permit students rapid language acquisition. There are no restrictions for foreign graduate students to apply for scholarships in Brazil.

Cooperation has also been encouraged by open research facilities in the ABC countries. These resources (including such examples as the Pierre Auger Observatory in Argentina, the National Synchrotron Light Laboratory in Brazil, and the Cerro Tololo Inter-American Observatory in Chile) are regularly used by faculty and graduate students of all countries in the area.

## Europe: Double Degrees and Beyond

France and Germany have a tradition of providing PhD scholarships to ABC students in science and engineering (more recently also at the undergraduate level). Once back in one of the ABC countries, young PhDs tend to establish links with their former laboratories in Europe. This has induced very fruitful cooperation, particularly given that such connections often benefit from regular funding. As a consequence, since the early 2000s, a group of Brazilian universities has maintained double-degree programs in engineering and basic sciences at the undergraduate level with French and, more recently, Italian and German universities. More than a thousand Brazilian and European students have participated in these programs. New programs and new areas are added all the time. A similar situation occurs in Chile, while in Argentina the main partners are Spanish universities.

The European Erasmus Mundus program has also furthered internationalization in the ABC countries. Although the numbers associated with this initiative are still relatively small, they have connected institutions that would not otherwise exchange students. At the present time, much of the international engagement with Europe involves research projects and the exchange of graduate students. The European Union Framework Programs have been an important funding resource for these arrangements.

## Africa, Oceania, and Asia

Of the ABC countries, only Brazil has a strong (albeit tragic) historical and cultural bond with various African countries, in light of the slave-trade history. Only very recently did a Brazilian cooperation begin with former Portuguese colonies in Africa. The Lusophone Afro-Brazilian University of International Integration (UNILAB), a federal university devoted to cooperation with the lusophone community, was opened in 2010.

Institutional cooperation with Australia and New Zealand has been hindered by the incompatibility of financing models, although much progress has recently taken place.

Due to language issues, cooperation with Japan traditionally has been limited to involvement by Brazilians of Japanese heritage. Cooperation with China and South Korea is incipient but gaining momentum, especially as far as research is concerned. Three Brazil-China research centers were opened recently.

## The United States: One Option Among Many

The ABC countries recognize a "world of opportunity" when it comes to options for international engagement. In this context, the United States is one of multiple potential partners for possible collaboration—and one that, not incidentally, carries with it difficult historical "baggage" for some. US institutions considering international engagement in the ABC countries would be wise to inform themselves about the various dynamics at work in the region and to approach their ABC colleagues with both thoughtful awareness of the many dimensions of internationalization already in play and sincere appreciation for the evolving needs and interests of the region's universities. If done well, the Southern Cone higher education systems are likely to provide a vibrant and ready environment for true, sustainable partnerships.

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