

FALL 2012

ReVista

HARVARD REVIEW OF LATIN AMERICA

UNIVERSITIES



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June C. Erlick

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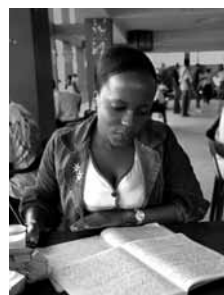
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Innovating Universities

BY FERNANDO M. REIMERS

THE NEXT DECADE OF HIGHER EDUCATION IN Latin America will have a very important influence in the future of Latin America itself. It is in universities that most of the public and private leadership will be educated. It is in universities that many of the ideas about how to promote social, economic and political development will be shaped or re-shaped. Universities will continue to directly provide numerous direct services to many of the communities of which they are a part, from hospitals to legal clinics, from day cares to high schools, from technology incubators to museums and concerts, for open enrollment courses or lectures for the public to narratives about the identity and culture of the peoples of Latin America. In addition, the growing importance of a university education in gaining personal freedoms will continue to stimulate growing demand for access to university in Latin America. What the leaders of higher education in Latin America do over the next decade will determine how pivotal universities become to the future of the region and how they keep up with the reinvention of universities taking place in the rest of the world.

In response to these demands higher education in Latin America will continue to grow: more universities will be established, more students will enroll, more people will work in universities. This growth will stimulate some innovation in higher education. Some of this innovation will result from the desire to serve new groups of the population, all the way from universities for ‘the people’, the most socially marginalized of all aspirants to higher education, to elite globalized universities for students aspiring to global leadership roles. Some of this innovation will result from the desire to perform the

core activities of research, teaching and extension in new ways, more efficient or with higher quality, for example using technology to support improvements in the quality of instruction, or creating new curricula or forms of organization to improve the quality of instructional programs. Much of the growing demand for access to higher education, for example, is likely to be met with online modalities or hybrids of higher education, in an attempt to reduce costs and to provide students the flexibility to continue higher education while working. Some of the innovation will result from the need to find new sources of funding and to contain costs.

We already see the signs of these innovations such as programs of accreditation to improve quality, efforts to internationalize universities, some efforts to build “world class” universities alongside efforts to build universities for some of the most socially marginalized students, growing use of online education for a variety of purposes, a growing number and variation of private universities. These innovations, while important, will not significantly transform the institution of the university. They represent incremental improvements, rather than disruptions, which, while important, do not fundamentally alter the social role of the university. That social role has only exceptionally changed, in Latin America or elsewhere.

In order to more deliberately contribute to the economic and social development of Latin America, however, universities should seek a second kind of innovation, one that expands their mission towards the promotion of a culture of innovation. This innovation must take place not just inside universities but in society, and universities should incorporate in their mission the promotion and diffu-

sion of social innovation to foster greater social inclusion, poverty reduction and sustainable human development. This is a more far-reaching proposal than the notion that universities should assume a “third mission” of economic and social development, which has been part of the discourse of higher education over the last three decades. For the most part, the “third mission” of the university has been interpreted as fostering the relationship between universities and industry as a way to expand the resource base for research and to facilitate economic development through the systematic adoption by industry of research and technology generated in the university. While the “third mission” is a very important re-interpretation of the classical mission of “extension,” it is insufficient to contribute to the innovation ecosystem that Latin America needs in order to find a niche in a highly inter-dependent global economy and in order to successfully address the persistent and pervasive challenges of social exclusion and unsustainable environmental practices.

To address these challenges the nations of Latin America will need to engage in an unprecedented effort of creation of innovative practices, ideas, technologies, and, more importantly, in educating an abundant supply of entrepreneurial leaders. They will need to educate entrepreneurs who pursue ambitions that exceed the resources they command, to use Howard Stevenson’s definition. In order to be an engine of innovation and of innovators, universities will not only need to explicitly focus on educating leaders and entrepreneurs, but will need to themselves develop an entrepreneurial culture. The urgent challenge for Latin American universities is to become entrepreneurial universities, this will require changes to their



institutional culture, organization and practices. It is not a challenge that will be successfully addressed by incremental change; it is an adaptive challenge that will require transformational leadership within and outside the university. Addressing this challenge should be the primary goal of efforts to recruit new leadership for Latin American universities.

To some extent, calling for universities in Latin America, and elsewhere, to transform their social role runs against their conservative culture. Universities have traditionally valued stability, predictability, and a deliberate isolation from external shocks, from the “real world,” in order to be conducive environments for teaching and research since the 19th century, and to the task of promoting contemplation and study of religious doctrine earlier. Some universities have misinterpreted that notion of “autonomy” as a lack of accountability to the societies that support them. In spite of the stability and conservatism of university mission and culture over the years, there are historical precedents of radical transformation of the university’s mission in Latin America and elsewhere. They were, however, the result of extraordinary social and political developments in the

external environment and the result of extraordinary leadership.

The most significant change of higher education, globally, took place when Wilhelm von Humboldt, as Minister of Education of Prussia, chartered the University of Berlin in 1810. This change was supported by the larger project of the Enlightenment, transforming the medieval university into a university committed to advancing truth, through inquiry and discovery, rather than transmitting revealed truth; a university committed to promoting independent thinking, and a university committed to enlightening the public, a counterbalancing force to the state. Under the influence of Wilhelm’s brother, Alexander Humboldt, who had explored vast regions of the American continent, the university charter expanded to include new fields of study. Berlin became a model that first transformed other European universities and then other universities in North and South America, and in many ways perfected with the creation of the ‘land grant’ universities in the United States. These changes in Latin America were also bolstered by the social and political developments following Independence.

Even before the establishment of Berlin University, some of the leaders of

Photo caption: *Dustinci as vendae verum consequaspel int que volectus et est magni*

the independence movement had spent some time contemplating what role universities should play in the creation of a new political order. Venezuelan independence leader Francisco de Miranda, for instance, visited Yale and Harvard Colleges in his travels in the United States in 1784. Sixty years later, as first President of the University of Chile, Andres Bello—who had a deep admiration for Alexander Humboldt, whom he had met in his youth in Caracas—engaged the university in several initiatives to improve public education, part of his efforts to construct a new narrative, a new identity, for the newly independent Republics. It was one of the founding faculty members of the *Facultad de Humanidades y Filosofia* of the Universidad de Chile, Domingo Faustino Sarmiento, who wrote an essay “Memoria sobre Educacion Comun,” proposing the creation of public education systems, after a study tour of Europe and the United States, supported by the Chilean president. The establishment of the new Latin American republics brought about the first important transformation of many of the Latin American

universities. The second deep transformation of the Latin American university took place at the beginning of the 20th century, with the creation of the “Centros de Estudiantes” and Federaciones de Estudiantes Universitarios, which in 1918 led to the Reforma de Cordoba, a student movement calling for deep reforms in university governance in which relations in the university community would be defined by the common search for knowledge, not formal authority. Cordoba called for much greater voice and power for students themselves and for science and inquiry as methods to find truth, in ways that echo Thomas Jefferson’s ideas reflected in the “Academic Village” at the University of Virginia.

The 20th century saw a significant expansion of access to higher education in Latin America through the creation of many new universities. This expansion brought with it new forms of organization, the emergence of private universities as well as experimentation away from the European model and towards the model of the U.S. research university. Most of the universities, and most of the variation in organizational forms, which exist in Latin America today were established in the 20th century. This gave way to the emergence of the teaching university, and it also provided access to tertiary education to groups beyond elites. Some of the new universities adopted variations of a “third mission” engaging in various activities that fostered university-industry collaboration. In some cases, students and faculty engaged significantly in political activism, contributing to political transitions to democracy and opposing authoritarian rule in various ways. States understood for the first time in the 20th century that universities were social actors, sometimes contentious. In this context, the concept of “university autonomy” from the state became a highly valued principle as a way to protect the university from attempts to control it. These changes, however, while important, are very much in line with the social mission Humboldt imagined for the University of Berlin.

The challenges of the 21st century call

for a much deeper transformation of the Latin American university of an order comparable to the changes just mentioned, and therefore equally challenging to bring about. This transformation would engage the university in shaping a narrative about what role the nations of Latin America will play in an increasingly global economy, in promoting processes of sustainable human development in the ways defined by the United Nations Development Programme: promoting economic growth, social development, and environmental protection in an inclusive, equitable and secure manner and including initiatives to alleviate poverty, advance human rights, gender equality, cultural diversity, international understanding and peace. This challenges current practice in Latin America where the public universities have rules and statutes that are guided by the national development plans, as developed by the executive branch, and where private universities often do not see themselves as having responsibility for shaping national discourse on national or regional development. Assuming this responsibility might place universities, and their leaders, at odds with the state and other influential groups, at least at times. If universities assume this role, university presidents might have to use the bully pulpit to challenge economic and social policy in order to expand the discourse on ways to advance human development, they may have to call for greater efforts to curb poverty and foster social inclusion, to question how governments balance the pursuit of security with the protection of basic freedoms of individuals and to challenge the lack of entrepreneurial activity of business groups as they call for innovation. In short, universities and their leadership may have to help shape more ambitious aspirations for social and economic development and thus have to challenge the status quo. This will inevitably create tensions, not just for university presidents but for trustees many of whom have business interests connecting them with industry and government. For example, a couple of years ago the president of a significant private Latin

American university in one of the most modern and industrialized regions in that country ended a successful 26 year tenure after he publicly protested the assassination of two of his students in the campus by police forces as part of their efforts to curb drug trafficking, which created some tensions between the office of the president of the country and the board. That president led some of the most entrepreneurial efforts in adopting a third mission for the university.

But if universities are to transform themselves into engines of innovation, economic as well as social, they will have to do much more than have outspoken presidents with ideas to contribute to the national dialogue on the future for the nations of Latin America. They will need to proactively seek to shape the policy agenda, by bringing attention to topics that should be on the agenda, and by contributing positions that stimulate policy debate. This would make them a significant policy actor in the democratic process, particularly important in societies where civil society is not sufficiently organized or powerful to partake in the process of policy formation. They will also need to explicitly provide students opportunities to develop entrepreneurial skills and aptitudes. To do this will require more than increasing the number of courses in entrepreneurship or leadership, although that would be quite valuable. It will require fostering opportunities for interdisciplinary collaboration of students and faculty in the design of innovative solutions to social and economic challenges. It might involve broad efforts of curricular reform, which seek to align programs of studies explicitly with the development of entrepreneurial, leadership and 21st century skills more generally. This will require establishing more fluid communication between universities and various industries and fields of practice. It might mean that all students must perform some form of service-based learning that can be used as a context of practice for entrepreneurship education. It will require engagements in new activities beyond teaching and research



The University of Chile has faculties and institutes distributed across five campuses and is the oldest institution of higher education in Chile. Shown here is what is known as Main House.

such as massively large-scale science and technology projects, contracts with governments and industry, consulting, incubating enterprises and promoting spin offs, engaging in patenting and licensing, selling services of various kinds and in general fostering a culture that is open to experimentation and innovation. Doing this effectively will require organizational support in the form of offices that liaise with industry and government, or that support technology transfer, patenting and licensing of intellectual property. In particular, it will require seeking new forms of organization and interaction such as innovation labs, and rethinking pedagogy and the roles of faculty and students, bringing them together with a variety of stakeholders to make room for more innovative and authentic forms of engagement in which students and faculty and new partners learn together as they seriously attempt to find solutions to significant social problems. Universities would benefit from external governing boards that represent a mix of views including industry, government officials, local leaders in the private and public sectors and intellectuals as a way to steer the university toward engaging more broadly with the world outside the university.

Why should universities assume this task? Some might argue that this broad based focus on social and economic innovation takes the university too far

away from the core missions of advancing knowledge through research and of educating students, and that the specific social contributions of the university should best be defined not from explicit intent or mission but as a result of the aggregate of the individual efforts of faculty members and students, exercising their academic freedom. In a nutshell, critics might argue that universities should advance private, not public, purposes. But universities receive much support, in the form of public funding, tax exemptions and donations, because they are expected to advance purposes bigger than the private purposes individuals could advance in a competitive market. They are the beneficiaries of a form of social trust that demands in return some accountability to the society that offers such trust and support. The last three decades have seen, at the global level, important education reforms designed to increase the accountability of education institutions—except for universities. This demand for accountability, part of a broader movement demanding transparency in governance of all institution, including government institutions, has finally reached the universities. A proactive response for this growing demand for university accountability would be to engage the university

in tackling some of the most important social challenges facing Latin American societies, turning it into a source of social and economic development of the many communities of which it is a part.

There are three paths universities might travel to exercise this responsibility for supporting sustainable human development in Latin America.

The first is to study the challenges of sustainable and inclusive development, with a focus on the design of innovative technologies, including social enterprises, programs and policies. Understanding the causes of social exclusion, for example, such as why some students do not learn what is expected of them in school, or understanding the obstacles to sustainable human environmental interactions, or the causes of social violence or gender inequality, or the barriers to economic growth or to entrepreneurship, or the solutions to improving the quality of life in cities, or to improving housing in low income communities requires the best efforts of centers of research and study. Studying many of these social challenges would benefit from new forms of organization of the production of knowledge, cutting across disciplinary boundaries, engaging scholars with practitioners working on those topics,

establishing institutional partnerships that allow the benefits of scale and that may help generate resources adequate to the task. Some of these challenges may require the engagement of large teams, rather than individual faculty members. They might require, because of their scope, inter-university collaboration.

The second avenue is to educate students to understand these challenges, to take responsibility to help solve them, equipping them with the skills to turn these challenges into opportunities. This will require much greater entrepreneurship and leadership education than is available at present in Latin American universities with more extensive use of project-based pedagogies, focused on authentic social problems, and explicit leadership education. A purposeful education of this kind, as opposed to a more general education designed to prepare students to understand themselves and the world, requires the adoption of different metrics and standards to manage it and measure success. If the purpose of the university is to promote sustainable human development it becomes feasible to monitor progress and to assess impact in ways that are unprecedented in institutions of higher education. This possibility has great transformative potential for the organization and management of universities.

The third avenue is to engage directly in efforts to address some of the challenges of sustainable development, for example, to directly participate, perhaps in partnership with relevant institutions, in improving basic education so that it more effectively includes all students, or directly participate in the provision of health services, or in the design of sustainable agricultural technologies or low income housing. One reason to engage in these efforts is that the practice of engaging directly in social and economic activities will allow the generation of knowledge, the core mission of the university, in ways that purely contemplative and more detached approaches to study simply do not permit. This is especially true for the professions, medicine, law, business, education, architecture and public health. But

another reason to directly engage in these efforts is that universities have distinct potential to contribute to solve challenges that are difficult for other institutions to solve. Elementary and secondary schools are of low quality in many places because they lack the scale and the capacity to improve themselves. Ministries of education or providers of education services have not adequately transformed schools. But universities could, not just through their schools of education, but engaging the entire university community, contribute to the improvement of public education at the basic and secondary level. Interdisciplinary teams of faculty and students could engage in the design of curriculum to develop up-to-date knowledge in the disciplines, or design pedagogies to foster the capacity to solve problems based on that knowledge, or to foster 21st century skills. They could develop programs to prepare teachers to foster cognitive skills and interpersonal skills such as collaborative problem solving, communication or leadership, as well as intrapersonal skills, such as empathy, discipline, resiliency and management of one's learning. Universities could open their doors to teachers who wanted to deepen their knowledge in the humanities, in the arts, in engineering, in social sciences. While taking on challenges of this sort would be new for most universities, a way to assess added value is to ask what other institution has a similar capacity to do it. This is the reason that embracing the challenge of promoting social innovation would be one of the most direct forms of accountability, of taking responsibility for the construction of a more sustainable future.

Universities could engage in similar efforts to improve public health, to foster sustainable environmental practices, to promote economic growth, reduce poverty and violence or improve cities.

While taking these goals as the focus of innovation to reinvent universities in Latin America, to give them a new purpose, to proactively respond to what will be growing demands for accountability, is feasible, it will not be easy. Universities in Latin America have insufficiently de-

veloped links with social and economic enterprises. A recent study in Mexico, surveying the efforts in "vinculación" in university-industry collaborations of 351 universities, found that these had not increased in the last 20 years. Existing collaborations are very simple, predominantly engaging students in internships and social service, with very few activities that lead to the incubation of enterprises, development of research projects or the provision of services of greater. This lack of change in university-industry collaborations is in contrast to the significant changes that took place during the same period in international trade, technology, increase in funding for higher education and expansion in access to universities (Cárdenas, S., Cabrero, E. and Arellano, D. (eds.) "La difícil vinculación universidad-empresa en México. ¿Hacia la construcción de la triple hélice?" (first edition, pp. 29-79), México:CIDE).

This vision of the entrepreneurial university in Latin America faces many challenges. Some will be external to the university. At least in the short term, the policy and regulatory environment, and the practices and expectations of governments and private groups, matter to what universities can do by way of directly engaging in generating social innovation. The most significant challenges will be internal; universities with established cultures may not see it easy to embrace a much different social role that will require faculty and students to engage in different activities, perhaps even in more work, although arguably more meaningful. As in the past, aligning the university with a new social role, will require extraordinary conditions, support and leadership.

Fernando Reimers is the Ford Foundation Professor of International Education and Director of the Global Education Innovation Initiative and of the International Education Policy Program at the Harvard Graduate School of Education. In 2012 Massachusetts Governor Deval Patrick appointed him to the Massachusetts Board of Higher Education.



REFLECTING ON EXCELLENCE

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Higher Education Peru and Beyond

An Uncertain Future **BY FELIPE PORTOCARRERO SUÁREZ**

WITH THE PHRASE “FRAGILE, THOUGH TENACIOUS beasts,” philosopher George Steiner attempted to describe the complex circumstances that permeate the institutional life of universities throughout the world, in his book *Errata: An Examined Life*. Despite today’s sweeping changes in universities in Latin America and beyond, these complex circumstances, this fragility, this determination, have existed almost since the foundation of universities more than a thousand years ago and even before the existence of nation-states.

Universities have been constantly submitted to the most varied political tensions, social demands, financial uncertainties and ideological ambiguities—thus, the ensuing fragility. Yet, universities’ long historical track record also reveals that they have known how to adapt, with a varying degree of success, to changing times and situations in which they have had to develop their educational activities. Universities have shown a surprising capacity for resilience—hence the tenacity—and they have demonstrated a

decided ability to overcome the most unforeseeable hardships and to deal head-on with world trends that have stood in the way of their mission and deep philosophical sentiments.

Perhaps the most relevant of the recent sweeping changes—both for its speed and scope—has been the massive expansion of higher education. In 2009, 164.5 million students were enrolled worldwide, according to UNESCO data (UNESCO Institute for Statistics, *Global Education Digest 2011*. Montreal: 2011).



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That is double the number of students enrolled a little over ten years earlier, in such diverse regions as Asia, North America, Europe, Latin America and the Caribbean. The development of post-industrial societies, the expansion of service sectors in increasingly knowledge-based economies and the growth of the middle class explain these changes in the university system to a large degree. As a result of this transition from elite to mass education, the institutional heterogeneity of higher learning has increased, and its quality—in more than a few cases—has been seriously affected.

Peru has not been immune to these processes, but development here has followed a course with peculiarities worth mentioning. The huge explosion in the growth of higher education in Peru took place between 2005 and 2010, even though the key to this phenomenon is actually to be found earlier, in 1996, when Law 882 established “conditions and guarantees to promote investment in educational services in order to modernize the educational system and to widen its offerings and coverage.” Perhaps even more important, the new law sought to “promote free private initiative to carry out activities in the field of education (...)

whether for-profit or non-profit.” To facilitate this new orientation of the educational system, the Peruvian state designed diverse tax incentives benefiting for-profit institutions, among which was the granting of a tax credit equivalent to 30 percent of the amount invested in education.

The effects of this new legal framework soon became apparent. Between 1996 and 2010, the Peruvian university population grew to 493,000 students, but 74.3 percent of that increase corresponded to expansion in private higher education, mostly at for-profit universities. Sixteen new private institutions were created between 2005 and 2010. At the beginning of the last decade, the panorama of higher education in Peru had experienced radical growth, since the 57 universities (28 public, 29 private) surged to 100 (35 public, 65 private) in 2010.

These numbers also reflect the composition of the university population: if in 1996, 60 percent of students studied at public universities and 40 percent in private ones, in 2010, the figures were exactly the opposite (40 percent public, 60 percent private). The private sector has replaced the public one in an irreversible trend. Even as I write these lines, the domination of the private sector in uni-

versity education increases relentlessly. At the present time, there are 19 proposals for new universities under discussion at the National Council for the Authorization and Operation of Universities. Yet Peruvian citizens are hardly discussing the subject at all.

The consequences of this new scenario are many. First, public universities have reformulated and diversified their money-making strategies to finance their activities. The direct commercialization of products and services—among them, pre-university preparation, graduate-level programs (generally not free), consulting services, laboratory fees, training programs and charges associated with entrance exams—generate almost a quarter (and in some cases, a full third) of total university income.

Second, the massification and proliferation of for-profit universities, some of them of woefully low academic quality, has generated changes in the educational mission, so that the emphasis on acquiring competencies and instrumental skills, which in theory permit a more rapid insertion into the job market, has diminished interest in the formation of citizenship values and development of critical, imaginative, creative and

innovative thinking. Many interest groups involved in higher education have deferred to the dangerous idea that arts and humanities are useless ornaments to be eliminated from study plans, since these fields lack practical impact and visible effects in the areas of competitiveness and efficiency that global markets demand to achieve economic success.

Finally, accreditation, a movement that arose to ensure the quality of higher education throughout the world, has come into being only recently in Peru and in minimal fashion, especially compared to other countries in the region such as Argentina, Chile, Brazil and Colombia. Although it's true that Peru has accreditation for certain fields of study, the concept of accreditation is still not well enough known or respected to guarantee the process.

Three ingredients are absolutely necessary to reach international standards.

Thus the question remains: how can universities respond to these new challenges in an international context in which world economies and societies demand greater generation of knowledge that contributes to global competitiveness and social inclusion? A 2009 World Bank study, *The Challenge of Establishing World Class Universities*, by Jamil Salmi, shows that three ingredients are absolutely necessary to reach international standards: a high concentration of talent among both students and faculty; a combination of tangible and intangible resources to create an environment that favors learning and foment investigation; and, finally, an administration that provides incentives for strategic vision, innovation and flexibility, in order to effectively manage available resources without falling into the temptations of bureaucracy that tend to engulf all institutions, not just universities.

The most serious universities in the world have become convinced that the

hard core of their purpose in society is tied to their educational mission, the pedagogical model they promote, and the values their professors transmit in the classroom. In these halls of learning, something is produced that can be compared metaphorically to magic. These are spaces of significant and pertinent learning, thanks to professors who stimulate interaction with students and who, during this same process, open all our minds to new questions and reflections so we may all grow not only in knowledge but in humanity.

It follows that the principal mission of universities is to educate our youth, that is, to form them through knowledge, technical abilities and rigorous analysis, but also with values, imagination, creativity, a sense of responsibility and a vocation for service to our country and the world in which they

will live for the rest of their lives.

To fulfill this mission, as Martha Nussbaum suggests in *Cultivating Humanity: A Classical Defense of Reform in Liberal Education* (Cambridge: Harvard University Press, 1997), three requisites are essential. They are apparently simple, but take on enormous pedagogic importance for us professors and academics—very often seen as a strange kind of folk—if we are to guide the students who pass through our classrooms to become an authentic elite leadership, as the well-known Peruvian Jorge Basadre calls it in *Ante el problema de las “élites”* (Lima: Talleres Gráficos P.L. Villanueva, 1968): individuals who are conscious of personal and professional challenges that they will have to face throughout their entire lives.

In the first place, societies need students who cultivate their humanity, that is to say, young men and women who have the capacity for self-criticism, take hard looks at their lives and projects, who question their traditions, stereotypes,

prejudices and beliefs that have been imposed by self-complacent authorities and the inertia of habit; who aspire to lead a life that questions beliefs accepted as natural and only accepts those that survive because reason has shown they are coherent and justified.

Second, it is necessary that young students imagine, feel, understand and see themselves not only as citizens of a particular country, region or locality, but realize that they form part of an inevitably international reality and that, in this context, what happens with other human beings who are different in their beliefs and physical aspect is something that is relevant to them and that should concern them as part of their own lives.

Last, university formation ought to be nourished by the capacity to think about being in someone else's shoes, to understand their emotions, aspirations and desires. In other words, students ought to be able to decipher the enigmatic and mysterious meanings of other lives. Art in general and literature in particular enable us to interpret these mysteries through our imaginations. This activity enriches us and expands our own existence with a depth and intensity that allows us to overcome obstacles in a world filled with injustice and misery, evils that we all aspire to do away with, aiming to achieve just, economically prosperous and environmentally sustainable societies.

To apply this formative philosophy for higher education, not only in Peru but throughout the world, would permit us to better confront the uncertain future that is awaiting us.

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Management in Latin American Universities

No Longer an Oxymoron **BY ANDRÉS BERNASCONI**

IT IS OFTEN SAID THAT UNIVERSITIES ARE conservative organizations, slow to change, wedded to their ancient rites and cherished routines, or to newer traditions more of the “invented” type, as when universities established in the twentieth century in Latin America distort history to claim roots buried deep into colonial times. But whether adhering to old or “new” routines, universities are seen as traditionalist in values, risk-averse in temperament and perhaps a bit stale in constitution. I beg to disagree. I see rapid and profound change happening everywhere and faster than I, as a researcher on higher education, am able to study and report it.

And this is change that is truly global in scale, timing and effects. So much so that it is often very hard to pinpoint where a particular, now widely diffused trend, first emerged. Hard, but not impossible. In fact, I think I can tell where one of these seemingly omnipresent developments in higher education first saw the light of day. I allude to what is customarily called “managerialism,” or the idea and practice of governing and managing universities more like businesses and less like guilds.

Midway through the 1980s, a frightful decade in Latin America, with dictators ruling Argentina, Brazil, Cuba, Chile, Panama, Paraguay and Uruguay, and the region’s economies still reeling from the devastation of the recession which opened that decade—the “lost decade” of Latin America, as it was later dubbed—a momentous report was being issued in a faraway land which, as with so many other things made in Britain, would end up sending ripple effects throughout the world.

THE RISE OF MANAGERIALISM

The *Jarratt Report*, named after Sir

Alexander Jarratt, then chancellor of the University of Birmingham in England, who chaired a commission officially (and ominously) named Steering Committee for Efficiency Studies in Higher Education, advocated greater managerial authority in university governance. Higher education institutions were to be run as “corporate enterprises,” vice-chancellors (i.e. university presidents or rectors) should act as chief executives rather than academic leaders, and similarly, deans and department heads ought to serve as mid-level managers, while collegial bodies of faculty representation would serve an essentially advisory function.

This approach to university governance swept England first, then Australia and New Zealand, sprang into policy in Asia in the ‘90s, and rolling with the wave of the “new public management” fad in public sector reform, arrived in Continental Europe not long after, becoming a contemporary worldwide trend.

Latin America is no exception to its dominance. Championed, for example, by the administrations of Ernesto Zedillo in Mexico, Carlos Menem in Argentina, Fernando Henrique Cardoso in Brazil, Eduardo Frei and Ricardo Lagos in Chile, and César Gaviria in Colombia, changes in the traditional relationship between universities and the state began to take shape. While varying in details, these reforms share a common thread: central governments adopted a much stronger role in steering public universities than in the past (the democratic past, I mean, for dictatorships had typically kept universities closely controlled), required of them a much more careful investment of their share of public funds, enabled the expansion of private higher education and private funding of public higher

education, introduced accreditation and other quality assurance mechanisms, and in general expanded the regulatory devices intended to keep universities accountable and aligned with the development strategies of the nation.

A thorough appreciation of the significance of these policies in Latin America requires an understanding of what has existed previously. Throughout most of the 20th century, Latin American public universities claimed for themselves, and sometimes achieved, a degree of autonomy seldom found anywhere else in the world. It included not just the usual freedom to set curricula, admissions and graduation requirements, and to make the decisions on hiring and promotion of faculty, but it also entailed independence to define their charter. They could thus organize their internal governance and management structures, elect their authorities free from government involvement, create or close down programs, schools, or branches as they saw fit, decide if there would be tuition fees (there would not), partake in a constitutionally defined share of the government’s annual budget, and even benefit from the prohibition of law enforcement agencies to enter campus grounds unless authorized to do so by the rector. Private universities were first founded to provide for the education of the social and economic elites. Later in the 20th century, with democratization of higher education, the private universities multiplied to provide job credentials to the masses. These institutions were usually granted a somewhat diminished form of the autonomy enjoyed by public universities.

As institutions of higher education were required by governments worldwide to procure funding from sources

other than the government, and to become more attuned to the external demand for services like research, training, certification, consulting, and the like, the “ivory tower” concept of autonomy, which sees universities as separated from society to maintain the possibility of critical detachment, lost importance. At the same time, widespread policy agendas requiring greater accountability on the part of the university sector, the rise of the model of the entrepreneurial university in a knowledge-based economy, and budgetary pressures driving higher education leaders to be mindful of the notion of alternative use of public resources demanded that university managers think and act more like business executives and less as public servants entrusted with the administration of a public entitlement.

Latin American universities adapted to this new scenario (with the exception of a few highly ungovernable national public flagships). With more or less success, they have wrestled to align with emerging societal needs and taken steps to increase their effectiveness and efficiency.

WHAT MAKES UNIVERSITIES SO DIFFICULT TO MANAGE?

Yet there are limits to how far the analogy between universities and business corporations can be pushed, and therefore, to the expectations one can reasonably harbor as to the malleability of universities in today’s new political economy. While university governance and management have indeed become increasingly attuned to the language, knowledge base, practices, and goals of the corporate world, key differences remain between the management of a firm and the administration of a university, arising from essential disparities in goals, power base and sources of recognition.

First, of course, is the issue of ultimate goals. While the firm seeks to increase profits or value to stockholders, nothing of that sort exists in the mission of the university. This is not a difference in what is produced, for nowadays universities are not the sole producers of knowledge, training, and technology, sharing that

function with various for-profit concerns. What sets universities apart is how success is measured: not in a bottom-line figure, or in the price of shares, but in prestige or academic reputation. And often academic standing is at odds with profit margins: stellar faculty, state-of-the-art laboratories, and enriching educational environments cost beyond what most profitable rates of return would bear.

Next, the power of superiors to govern the behavior of subordinates is much greater in business corporations. Managing human resources in universities has been aptly compared with the notion of herding cats. Faculty can be incentivized, persuaded, even cajoled, but seldom directly ordered to do or not do something. One dimension of autonomy that remains a part of the nature of universities as organizations is collectivistic, group-based decision-making. Professors like and demand their committees, their academic councils, and their senates. Especially in Latin America, they are used to taking part in every aspect of governance and administration, typically by electing heads of departments, deans and rectors, and by sitting in legislative and executive bodies at the school and university levels. These roles they share, in most of Latin America, with students and graduates or administrative staff. Finally, professors and administrative staff in public universities usually cannot be fired by the administration, regardless of their performance. As a consequence, leading a university carries a political component much larger than what corporate culture understands as “politics” in the firm: while in business politics is a nuisance, in academia, it is the currency of the realm.

Just as universities measure their organizational success in terms of prestige (the collective opinion of authoritative others), so do professors gauge theirs on the basis of peer recognition. The opinions of the fellow experts in a field, expressed in publication decisions, citations, invitations to lecture, professional awards, book reviews, and the like, give shape to the professor’s charisma in her field.



Photo caption: *Dustinci as vendae verum consequaspel int que volectus et est magni conseceaque perum aut optat eius et iniae.*

Conversely, business firms evaluate their success according to their bottom lines, and the performance of their executives and employees is assessed and rewarded according to their direct or indirect contributions to those financial results.

This is not to say that academics don’t care about money, or that corporate citizens are immune to the opinions of their professional colleagues. All responsible



professionals seek to do a good job and be recognized—and rewarded—for excellence in their work. My point is not concerned with motivations, but with how different indicators signal the rank of an academic and of a business employee within their relevant communities. For professors it is chiefly peer recognition, while for the corporate officer it is salary and other compensation benefits.

In their managerial turn universities have shown that they can change, adapting to new realities. In Latin America, as across the globe, management functions

have reverted to professional managers, and corporate techniques such as strategic planning, business intelligence, market surveys, and performance indicators are no longer anathema in the halls of academia, or at least, in the offices of rectors and deans.

But there remains the challenge of adapting managerial concepts, tools and rationales to the special nature of universities as organizations. No longer radically autonomous, Latin American universities remain nonetheless driven largely from within and fundamentally different from

organs of public administration or non-governmental organizations (NGOs), and certainly, business firms. Universities will need to find ways to strike the right balance between their independence and the responsibility to society at large that comes from their claim to patronage from the state and other privileges.

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Move Over da Vinci!

Latin America's Heritage of Learning BY STUART M. MCMANUS

ON THE CUSP OF THE "AGE OF REASON" IN Mexico City, the jewel in the crown of Spanish America, the Royal and Pontifical University's Professor of Mathematics, Carlos de Sigüenza y Góngora (1645-1700) sat at his desk, one may imagine, his fine English microscope standing proudly on his instrument table, the Bible on a lectern in the background, and his astronomical notes and calculations in neat piles throughout the room. As the populace outside cowered in fear at the prospect of the divine retribution forewarned by the most stunning total eclipse of the sun that the Americas would see that century, the scholar "stood with my quadrant and telescope viewing the sun, extremely happy and repeatedly thanking God for having granted that I might behold what so rarely happens in a given place and about which there are so few observations in the books ..." This is a man who displayed the new spirit of inquiry that developed in Europe and the Americas from the late Renaissance, as well as that typically modern scientific world view that separates the natural from the supernatural and seeks to chart and understand the world around us rather than huddle in fear at its awesomeness.

Today scholars and policy makers in Latin America look to the universities of the United States as models, but there was a time when Latin America led the way in higher education. If we turn the clock back some twenty generations, or around 350 years, the landscape of the Americas both topographically and intellectually was strikingly different. In North America what little pre-Columbian urban civilization remained had withered under pressure of European diseases, and the Massachusetts Bay Colony could claim the North's only college, a plucky but tiny institution, which gradu-

ated the grand total of nine students at its first commencement ceremony. In contrast, Spanish America could boast true cities with tens of thousands of inhabitants who enjoyed the culture and intellectual life that springs from urban living. Providing higher education to the elite of the vast Spanish territories were almost 40 colleges and two grand universities on the European model in Mexico City and Lima. The Faculty of Medicine in Mexico City serves as a perfect example of Spanish America's considerable head start in higher education: by 1621 the city's university had three chairs of medicine (of physiology, pathology and pharmacology respectively), while Harvard would have to wait until after the Declaration of Independence for the foundation of its medical school.

If today the United States often sees its intellectual achievements as the fulfillment of the promise shown by figures such as Benjamin Franklin in physics or Washington Irving in letters, then Latin America's current achievements

like Galileo, Athanasius Kircher and Leonardo da Vinci possessed, in the words of the first historian of the Renaissance Jacob Burckhardt: "the highest individual development combined with a mastery of all the elements of the culture of the age." On such polymaths Burckhardt bestowed the title *uomo universale*, a "universal" or what we might call today a "renaissance man," an accolade that Carlos de Sigüenza y Góngora richly deserves.

Born of Spanish parents in Mexico City in 1645, at the age of 15 Carlos de Sigüenza y Góngora entered the Jesuit Order where he received training in rhetoric, philosophy and theology, before moving onto mathematics and "natural philosophy" (what we today call the natural sciences). Despite showing great promise, he was expelled from the Order under mysterious circumstances at the age of 22, whereupon he returned to his studies at the Royal and Pontifical University in Mexico City before briefly disappearing from the records. Still a

Among the forgotten figures in science and letters, none deserves to be remembered more than Carlos de Sigüenza y Góngora.

and future promise may be seen as building on a more ancient, but no less illustrious heritage that historians are only now beginning to appreciate. Among the forgotten figures in science and letters, none deserves to be remembered more than Carlos de Sigüenza y Góngora. In an age before excessive specialization, when it was still possible for a few men of genius to bestride the length and breadth of human endeavor, figures

priest but no longer associated with any particular religious order, he suddenly reappears when he was elected to the coveted chair of Mathematics and Astrology at the precocious age of 27, having come out on top in the battle of wits that characterized academic appointments at the time. He held this position until his death at the end of the 17th century, and in light of his many achievements "the Sun King" Louis XIV of



Don Carlos de Sigüenza y Góngora
1645-1700

Photo caption: *Dustinci as vendae verum consequaspel int que volectus et*

France asked the Creole professor to join his flourishing court at Versailles – an offer he declined. When not teaching at the university or managing the spiritual and financial affairs of the Hospital del Amor de Dios, where he was chaplain, he wrote extensively on astronomy, hydro-engineering, botany, political theory and pre-Columbian civilizations. Although some of his works were undoubtedly for a learned audience, he was also the author of the public report on the Franco-Spanish conflict over the Gulf of Mexico, *El Mercurio volante*, credited with being Latin America's first newspaper.

Such a range of achievements, almost unthinkable today, certainly wins Sigüenza y Góngora a place in the annals of American science and letters. However, it is his cultivation of reason and his separation of the natural from the supernatural—the most significant intellectual advance of the age—which sets him apart from the array of prolific scholars from that period and makes him worthy of the title *uomo universale*. A case in point is his famous dispute with the Jesuit Eusebio Kino over the significance of “Newton’s Comet” (1680), the first scientific controversy in print in the Americas. This intellectual battle be-

tween the Creole professor and the feted European scholar and missionary to Baja California pitted two world views against each other. Kino declared that the comet was a sign of divine wrath and foreshadowed terrible calamities on earth, a centuries-old view that was still common in Europe and the Americas. Indeed, this was the accepted interpretation in the British colonies where Increase Mather, the future President of Harvard, ranted that these comets were “warning pieces” that God discharged before his “murdering pieces,” and that the tails of comets caused “drought, caterpillars, tempests, inundations, earthquakes and disease.”

In contrast, Sigüenza y Góngora, while maintaining Christian orthodoxy and admitting that the intentions of the Divine were beyond human ken, rigorously refuted this view in his pamphlet *A Philosophical Manifest Against Comets Stripped of their Dominion over the Timid*. If Sigüenza y Góngora had merely mustered all the erudition at his command and, in a prose style pungent with the rhetorical spices of baroque Castilian, shown that there was no empirical evidence that the appearance of comets foreshadowed natural disasters, while citing the astronomical work of Kepler and the debates between the atomist Gassendi and René Descartes, his place as one of the foremost intellectuals of the colonial Americas would already have been assured. But he did more than that. He added the vital ingredient which was so central to the Scientific Revolution and the great leap forward in knowledge of and power over nature in the early modern period: prowess in mathematics. At the end of his pamphlet, he appended his observations of the comet and detailed calculations of its trajectory, which also happened to be the first use of logarithms and the newly invented decimal notation in print anywhere in the Americas.

This command of mathematics was also crucial to his achievements in cartography and engineering, for Sigüenza y Góngora was no “ivory tower” academ-

ic and he eagerly applied his skills for the good of his home city, overseeing the construction of canals to drain the flood water which frequently overcame whole districts for periods of up to five years. His knowledge of applied mathematics, in particular projectiles, was doubtless also the reason for him being appointed “inspector of the gunners” and why his advice was sought by the Viceroy of New Spain on various matters of defense, especially in the fortification of the Gulf.

Nor did he neglect the arts, that rich area of human endeavor in which the other “renaissance men” such as Alberti and da Vinci expressed their “individual development.” If the premier *uomo universale* of Italy excelled in painting, Sigüenza y Góngora was a novelist, indeed the author of the very first American novel, *The Misfortunes of Alonso Ramirez*. This cross between *Treasure Island* and *The Travels of Marco Polo* is a literary creation inspired by the true story of an impoverished carpenter taken captive in the western Pacific by pirates who took him on an adventure-filled circumnavigation of the globe before finally freeing him in his native New Spain. A widely studied text today in both the United States and Latin America, *The Misfortunes of Alonso Ramirez* shows a level of creative genius that many modern scientists—and indeed novelists—would envy.

Yet on the face of it, there might seem to be little that separates “the good professor,” as his biographer Leonard Irving calls him, from the European savants of his age. So what makes him a uniquely Latin American figure? The current author, given his profession, may be forgiven in answering that it is as an historian that his Latin American identity is most apparent. In an age in which the colonial caste system elevated those with pure Spanish ancestry above all other groups and forbade higher education to all but these, the “good professor” learned the local languages and was devoted to the study of the pre-Columbian history of the Americas. Thanks to his close friendship with various members

of the Ixtlilxóchitl family the peniless descendents of the *Mexica* kings of Texcoco he learned Náhuatl and other indigenous languages, and built the foremost collection of pre-Columbian artifacts of the day. He dedicated a considerable part of his seemingly boundless energies to these studies, and when he wasn't tracking the movements of heavenly bodies with the aid of logarithms, improving Mexico City's drainage system or mapping the Gulf of Mexico, he led archaeological digs around the Temple of the Sun at Teotihuacán and wrote widely on indigenous culture and history. As royal cosmographer he sought to integrate the indigenous and Hispanic heritages by dating his astronomical predictions according to the *Mexica* calendar, which he had reconstructed from careful study of ancient monuments. In short, although building on a broadly European scientific tradition, his identity and sense of self were rooted in the complexity and contradictions of his native New Spain.

In the context of such rich history, of which Carlos de Sigüenza y Góngora is just one outstanding example, the onward march of Latin America's universities might be seen as a rebirth, a reclaiming of the region's heritage. You might even call it a renaissance.

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Catholic Universities

What Are They And What Should They Be?

BY PABLO QUINTANILLA

On July 20, when this article was already sent to the editor, Vatican State Secretary Cardinal Tarcisio Bertone prohibited the Pontificia Universidad Católica del Perú from using the words "pontificia" and "católica" in its name. Reasons were given—some false and others ludicrous. For example, Bertone falsely claims that the university's statutes collide with the Apostolic Constitution Ex Corde Ecclesiae. As anyone can see by comparing both documents, this is simply not true. In the second category, Bertone provides an abundance of ludicrous details: that the university paid homage to Father Gastón Garatea and that students and faculty read the book Liberation Theology by Father Gustavo Gutiérrez in their courses. Both Garatea and Gutiérrez are practicing Catholic priests, although probably Cardinal Bertone doesn't like it.

WHAT SHOULD A CATHOLIC INSTITUTION BE, and what should a good university be? Is there any relevant difference between a good university and a good Catholic university? What does the word "Catholic" add to the word "university"? Answers to these questions may help clarify our understanding of both.

A good Catholic institution—or person, for that matter—is one that simply follows what Jesus taught, that is: treat your neighbor, the other person, as though he or she is an end in itself, not a means for anything else. Be compassionate, cooperative and strive for equity. If we take those aims in consideration, it is clear that most of us don't always behave that way and that most institutions don't either, not even, as we all know, the Catholic Church itself. Thus, we should regard those objectives as regulative ideals

in Kant's sense, that is, as something that we will never fully reach but that compels our actions in a particular direction. These objectives, therefore, become the criteria to judge our behavior.

A good university also has some high objectives, especially the search for truth in all domains, the responsibility to pass knowledge from one generation to another without gaps or distortions, and the moral obligation to be relevant to society.

In this context, what should a Catholic university be and in what sense should Catholic universities be different from non-Catholic ones? The most important requirement for a Catholic university is to be an excellent university, that is, to have international standards of excellence for research, teaching and social responsibility.

Both kinds of institutions look for the truth and are concerned about transmitting it to younger generations, being relevant to society in the quest of knowledge and equity. They also seek to be cooperative and compassionate, providing good role models for other institutions and people. "Role model" is a key word. A good Catholic university has as a model an ideal community of responsible truth-seekers who respect other views and work to make the world a better place for all, regardless of their faith and background. If a Catholic university is good enough to be a role model for even non-Catholics, then it is likely doing a good job. If it is only a good role model for Catholics, you might suspect something is wrong.

To the extent of doing a good job in the sense described, no important differences exist between a Catholic university and any other good secular university. One important requirement, which should apply to all universities concerned with a

wide horizon of research and education, is that a Catholic university has to guarantee not only a professional technical education but also a broad humanistic background. Through its curriculum students become familiar with the history of classical human culture, as well as the role the Church played in it, both in the good aspects and the bad. The university should be a critical institution of the system, not another means for its survival. Just as the Gospel incarnates a revolutionary view of morals and human living by criticizing, sometimes radically, the system and the Church of its time, a Catholic university should also always be critical enough of the established system to remind us of its errors. It also always has to leave open room for the dialogue between reason and faith, that is, between science and religion. Sometimes science and religion confront each other with skepticism. There is no reason for this, and with a more open attitude, both would learn from one another.

Furthermore, the Catholic Church has an explicit preference, especially, but not solely, for the poor and the excluded—those who need more from God. A Catholic university, then, should help students with intellectual abilities but without economic means to pay for an expensive and good education. At the same time, it should provide the opportunity to hold academic and religious activities where interested students and faculty can practice their faith. However, what is essential to true Christian education is to educate students within religious and philosophical freedom, so that they can choose autonomously what to believe and how.

Probably the most important goal of any, but particularly Christian, education is to facilitate autonomy and self knowledge. Both of these goals are possible only where there is intellectual freedom, pluralism and academic excellence. In that sense, a Catholic university has to open lines of research and debate, not close them by assuming we have some kind of truth that others don't have and that, therefore, we must teach it to them.



Photo caption: *Dustinci as vendae verum consequaspel int que volectus et est magni conse-
ceaue perum aut optat eius et iniae.*

That is why a Catholic university that admits *only* Catholics is not Catholic at all. Pluralism, respect for others views and beliefs, intellectual freedom and support for all intellectual and social initiatives, are essential elements for a true Catholic education. Therefore, all or most intellectually relevant views have to be present in a Catholic university, as part of the dialogue the institution has to foster, even if these views are regarded as non-Catholic, because self criticism and improvement are only possible when we are familiar with views we not only don't share but view as contrary to ours.

The question now is whether Catholic universities hold these standards, especially in Latin-American countries. In order to answer this question we have to review a little history. As it is well known, most European universities began as part of the Church. They started to diverge, however, around the beginnings of modernity and Enlightenment. At that time, the Catholic Church projected the image of an institution that could limit intellectual creativity and scientific research. Of course it didn't have to be that way, because most scientific devel-

opments of the time didn't threaten faith at all, as proved by the fact that nowadays those scientific developments are fully accepted. However, members of the Church's hierarchy wrongly considered scientific thinking to be dangerous and the logical consequence was that the very image of the Church was severely affected. This situation had a perverse outcome: many academics made false professions of faith, which is already bad enough, and many others lived scared of being prosecuted or fired for not being orthodox enough. Instead of being *Mater et Magistra*, the Church became the typical fairytale bad stepmother.

Thus secularism, understood as a progressive separation from the Church, was the rule for intellectuals and academics of the Enlightenment. For this divergence, not to call it divorce, between the academic culture and the Church, both parties are to blame. However, in most cases the hierarchy of the Church didn't see things that way. In fact, Pope Pius X (1835-1914) called modernism the source of all evils, which meant that for many people to be an academic and also a Catholic started to be seen as

incompatible. Pope Leo XIII (1810-1903), an intellectual himself, was the first to suggest establishing Catholic universities as a way to confront the pervasive intellectual secularism of the time. The famous University of Louvain was founded anew with such objectives in mind in 1835. And many North American and Latin American universities began to open at the time, such as the Catholic University of America (1887), the Catholic University of Chile (1888) and the Catholic University of Argentina (1910). In some cases, these universities were founded by the local bishop or the Church itself, but in other cases they were founded by a group of Catholic people with the leadership of a priest, as was the case for the Catholic University of Peru that was founded in 1917 by Father Jorge Dintilhac and a group of Catholic gentlemen.

It is fair to say that Catholic universities in Latin America fall into two big groups. In the first, most follow the criteria of excellence, pluralism and academic freedom that I have mentioned before. This is especially true for Brazilian and Mexican Catholic universities, many of which are run by Jesuits, who have a long experience with excellence in education. Another important institution is the Catholic University of Peru, autonomous by Peruvian law, which has shaped most of the intellectual life in that country as well as produced many of its most important academics. These universities tend to believe that their main obligation to society is to produce good scholarship, teaching and social responsibility, rather than be the guardians of doctrine.

The other group consists of Catholic universities that tend to privilege their role as institutions devoted to educating in the doctrine of faith. They tend to be rather conservative and run the risk of becoming too alienated from contemporary society to really be relevant to it. Becoming an academic and religious island in the sea of contemporary diversity can be seen in two ways. It might be regarded as a fortress of truth and doctrinal purity in a world of heterodoxy, therefore being the key to maintaining truth

in times of confusion. But it might also be regarded as a relic of a time gone by, in which the Church believes it is the sole keeper of truth and has nothing to learn from non-Catholics. If such is the case, these institutions run the serious risk of succumbing to new manifestations of fundamentalism, which are the real enemies of Catholicism. In fact, what has done more damage to the Catholic Church in former times is its own fundamentalism, rather than other religions or beliefs.

A curious example of this tension between two ways of understanding Catholic universities is the case of the Pontificia Universidad Católica del Perú. As mentioned before, this university was not founded by the Church itself, but by a group of Catholic gentlemen and a priest in 1917. Many years later, the Peruvian intellectual José de la Riva Agüero donated most of his inheritance to this university. Later on, the Pope gave it the title of “Pontificia” for its excellence in education and for its Catholic values. Now, almost a hundred years after its foundation, what started as a small and rather poor university is already the best academic institution of the country and a highly regarded one in Latin America. It is also fairly rich. It always kept its Catholic identity, reflecting the teaching of Ecumenical Council Vatican II, which opened the doors of the Church for more pluralism, freedom of belief, and respect for all views and strict defense of human rights and ethical values.

Nevertheless, at present the PUCP is in a legal dispute with the Archbishop of Lima, Cardinal Juan Luis Cipriani, a member of Opus Dei, who claims that the university’s budget should be controlled by the Archbishop himself. In the recent past, his activism has been suggestive: Cardinal Cipriani strongly supported Alberto Fujimori’s *dictadura* from 1992 to 2001, explicitly and publicly expressed his disdain about human rights, and now wants to control the best university in the country. The conflict here is about what a Catholic university should be: either a pluralistic place for religious freedom and Catholic thought,

or a dogmatic guardian of one particular way to understand faith. Furthermore, most Peruvians think (84 percent in a recent independent poll by Grupo Apoyo) that what the Archbishop is really after is the economic budget of the University. In fact, Cipriani has managed to divide the Peruvian Catholic Church to the point that many priests and nuns oppose his attempts to control the University, and favor its autonomy. In times when the Catholic Church doesn’t need more problems, Cipriani has deeply split the Catholics of this Andean country. Rather than being a symbol of unity, he has become a divisive factor among Catholics. But this is just a symptom of the kind of recent problems the Church has to face worldwide.

Latin America strongly needs more good universities and also more good Catholic universities, in the sense I have spelled out earlier. This is true not only because education is the only way in which social and economic troubles of these countries can be overcome, but also to continue the task of building a Catholic Church in the spirit of Jesus, which is something we Catholics still have in our agenda. It is said many times that Latin America is the most Catholic continent in the world, because it has, with Africa, the largest number of practicing Catholics. In fact, Pope John Paul II used to call Latin America the “continent of hope.” Certainly we do have hope, but I seriously doubt that this is the most Catholic continent, given the terrible rates of inequality, unfairness, violence and poverty. Countries with these calamities can certainly try to live up to Christian standards, but they definitely are not models of Catholicism. Yet these countries—and their universities—are still places of hope, where better and different ways to understand Christianity may appear.

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INNOVATION AND QUALITY

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Student-Centered University Learning

Turning Traditional Education Models Upside Down **BY JULIE SCHELL**

TEACHERS TEACH. STUDENTS LEARN. THIS IS THE dominant paradigm of university education in Latin America. But is this age-old model sufficient to prepare students for tomorrow in rapidly evolving region clamoring for innovation? More and more, educational reformers are emphasizing that, no, it is not. However, student-centered teaching methods, such as Peer Instruction, are gaining popularity in Latin American universities as the

region seeks to improve the quality of higher education.

Universities in the region are facing large increases in the number and diversity of students demanding effective and affordable tertiary education. This influx is the result of well-meaning and successful governmental incentives instituted in the 1990s and the new millennium to improve secondary schooling in the region.

In addition to increased demand or higher education, the rapid expansion of a technology-driven economy has elevated the need for Latin American countries to prepare students for an evolving labor market. The growing size, diversity, and workforce needs of the Latin American student body is forcing widespread ac-

High School physics students in Brazil vote during a Peer Instruction session.

knowledge among governments and educational leaders that new, innovative approaches to teaching and learning are crucial to future success.

TEACHER-CENTERED MODEL OF EDUCATION

The dominant model of education in Latin America and across the globe is based on an old paradigm that emphasizes information delivery as the purpose of education. In this model, the teacher plays the central, active role, standing in front of the classroom, transmitting knowledge to students, who play the passive role of knowledge receptacle. The transmission of information comes primarily in the form of lecture and assigned textbook readings. Students who succeed in teaching-centered models are primarily those who have honed their ability to memorize, recall, and accurately repeat the information delivered to them through lectures and books.

Teacher-centered models had a place in the past. Indeed, before the advent of the printing press, transmitting knowledge through lecture was the sole mechanism for information delivery. In addition, this kind of teaching offered an equalizing effect for Latin America's striated student populations: with lecture, all students are taught the same material in the same manner, regardless of personal demographics.

The purpose of 21st century education in Latin America and elsewhere cannot consist solely of information delivery. For regional advancement, Latin America needs a critical mass of citizens who can do much more than memorize, recall and repeat information transmitted to them en masse. Latin America requires skilled professionals who can assimilate and transfer knowledge from their university classrooms to create, innovate, and solve the region's most pressing problems and to accelerate economic and social growth. Furthermore, despite the equalizing effect of many teacher-centered models, the most recent research on student learning emphasizes that students' academic achievement increases when their learning is customized, interactive,

and student-centered rather than standardized, passive, and faculty-centered.

STUDENT-CENTERED MODEL OF EDUCATION

Student-centered models of education incorporate a redefined purpose of education that features the student as a central and active participant. Instead of experiencing education in the form of information delivery, memorization and repetition, students interact with subject matter and instructors in ways that build capacities that are mapped to 21st century skills and abilities. These abilities include collaboration, problem solving, experimentation, and the capacity to use prior knowledge to solve problems or navigate situations they have not encountered before (i.e. knowledge transfer).

Peer Instruction: A Research-Based, Student-Centered Teaching Strategy. Many student-centered approaches available to Latin American faculty endeavor to transform their teaching and their students' learning. Recent research on faculty development initiatives to improve university teaching and learning in Chile, Costa Rica, and the Dominican Republic suggest that when provided specific training, university faculty do incorporate student-centered teaching methods into their practice in the hopes of improving their students' learning. Peer Instruction (PI) is one specific, student-centered teaching method that refocuses the purpose of education on knowledge assimilation. Adoption of this method in Latin America is extensive and continuing to grow. Faculty actively use PI in many different disciplines and institutions all over the region, including Brazil, Chile, Costa Rica, Mexico, Colombia, Honduras, Portugal, Uruguay, Panama, Guatemala, Puerto Rico and the Dominican Republic.

What is Peer Instruction? Peer Instruction is a research-based pedagogy developed by Eric Mazur Group at Harvard University in the 1990s. It is an interactive, student-centered teaching method that elevates the role of the student to that of a central,

crucial participant in the classroom. By providing frequent feedback to individual students about their understanding, PI also offers more customized approach to learning than more traditional, faculty-centered models.

According to Eric Mazur, PI turns the traditional model of education upside down. Instead of coming into class for the purpose of quietly observing a teacher covering the material, students first cover the material themselves, outside of class. Student-driven coverage is facilitated by a method called Just-in-Time Teaching (JiTT). JiTT facilitates out-of-class activities by providing opportunities for students to engage in information delivery on their own, by reading text or watching a video, and then responding to three questions to warm-up their thinking before class meets. These warm-ups are not considered homework and are low-stakes: students are graded on effort only, and earn credit for their work.

Teachers still play a critical role; however, their expertise is put to far better use than simply for information coverage. Teachers analyze student responses to the warm-ups before class, using their experience and content knowledge to hone in on trends in student difficulties or misconceptions. The warm-up questions also allow teachers to signal to students the core and important concepts for the course. In addition, the warm-ups give students practice engaging in the 21st century skills of critical reading, analysis and self-monitoring (awareness of what they know and what they don't know). Using PI, teachers then structure in-class time around short conceptual questions, or ConcepTests, which confront the difficulties in learning that emerge from the warm-ups.

In this way, PI leverages the unique expertise of the faculty member in a more effective manner than traditional models allow. It also provides a more customized approach to learning, based on frequent analysis of individual students' needs.

Unlike a traditional lecture, in a PI environment, the focus is constantly shifting among instructor, subject matter, and students. To implement PI, instructors

engage in the following process:

Instructors design ConcepTests to engage students in challenging conceptual thinking and to address student difficulties in understanding specific concepts. Instructors give a brief presentation about the concept that sets the context for the class session; pose a ConcepTest; give the students a few minutes to think; and then require students to commit to their own individual answer to the ConcepTest.

Students respond to ConcepTests using classroom response systems, such as clickers or flashcards.

Students respond to ConcepTests using classroom response systems, such as clickers or flashcards. Once the student commits an answer, teachers ask students to find a neighbor with a different response and guide them to try to convince their neighbor of their answer. During this peer discussion stage, students get the opportunity to practice persuasion and logical analysis as well as collaboration. They also get to test ideas and make mistakes in a less threatening context, with one or two peers instead of in front of the instructor or the entire class. After a few minutes, teachers bring the students back together and ask them to commit to an individual answer again. At the end of the process, teachers and/or students give explanations of the correction answer.

A CASE OF PEER INSTRUCTION IN BRAZIL

Professor Ives Araujo teaches physics and physics education at Federal University of Rio Grande do Sul (UFRGS) in Brazil. After learning about PI in Brazil and then studying it in-depth for a year as a visiting professor in the Mazur Group, Araujo had a lingering question: How would JITT/PI implementation work in the context of a major Brazilian university with a small class size of 15 students and mixed among physics majors and physics education majors. Araujo chose to use PI because

his main goal as an instructor was to drive student learning. “In my personal experiences, I have witnessed the inefficacy of using time in class to expose students, for the first time, to content that is already in the book. I know of several teachers who spend class time just copying the content from the text onto the blackboard. PI on the other hand promotes cognitive and emotional engagement of students in class. It’s a much bet-

ter way to use in-class time,” said Araujo.

When asked why he continues to use PI, instead of going back to lecture, he said: “I think when teachers have the experience of seeing students talking enthusiastically and discussing the concepts they are trying to teach, instead of seeing students’ bored faces in response to their lecture, they will never come back to traditional, passive teaching. That’s my case.”

Using a mix of other student-centered teaching methods with JITT/PI, Araujo observed increases in student conceptual understanding, engagement, and enthusiasm about the subject matter. Araujo plans to continue using PI and is actively working on a project to help Brazilian high school teachers implement PI in their classrooms.

A CASE OF PEER INSTRUCTION IN GUATEMALA

Eduardo Alvarez is a professor of physics and statistics at the Universidad del Valle de Guatemala in Guatemala City. He first heard of Peer Instruction in 1997 and began to use it in introductory Physics courses at his university. After a hearing a follow-up talk by Eric Mazur at his university, he began to think more about PI in other contexts, including his masters-level course, Statistical Analysis. His course has approximately 20 students.

When asked about why he chose to use PI in his graduate course, Professor

Alvarez responded, “When I teach my class at the masters level, [it is assumed] that the students already know and [can] manage the material. The majority take undergraduate statistics courses and the reality is that they do not know or how to manage [statistical] concepts. If you ask [them to describe] a concept, they respond with a formula.” Alvarez knew that to address students’ approaches to learning statistics, he needed to change his approach to teaching it. He decided to focus on helping students develop conceptual understanding, and PI was a natural fit.

When asked why he continues to use PI, Alvarez remarked about the importance of helping students develop the ability to analyze different situations in order to make competent statistical decisions. “When I use Peer Instruction, students are more comfortable [with]...concepts. For example, if I ask them what kind of sampling [technique] they [might] use in a given situation, they feel free to give their opinion based on concepts and their perception and experience, versus thinking [like] a guru of sampling.”

Alvarez also emphasized that students seem to feel more comfortable trying out different opinions and making mistakes in a PI environment. Such experimentation with concepts and ideas is a skill that is essential for future innovators. “Sometimes, students think all the concepts are perfect and there is only one answer for a given situation. With Peer Instruction, they can see the different points of view of a situation.”

While Alvarez uses other approaches in addition to PI, he credits the method with leading to positive gains for his students. He said, using PI “was a great experience. The students changed and they are more motivated to learn.”

CONCLUSION

An array of studies demonstrates the benefits of Peer Instruction across a range of institutions and disciplines. By changing the model of education from teacher-centered to student-centered, PI facilitates knowledge acquisition and assimilation through ac-

tive engagement of students and faculty alike. Twenty years of research suggests that PI improves student conceptual understanding, academic performance, student engagement, and perhaps most importantly for Latin American institutions, retention in science, technology, engineering, and mathematics majors.

Over the past two years, in partnership with LASPAU-Affiliated with Harvard University's Initiative for the Development of Academic Innovation, we have trained more 1,500 faculty across Latin America to use PI to improve teaching and learning in their institutions. Future research is needed to fully understand the conditions of uptake of PI in Latin America and its influence on higher education in the region. However, PI remains a powerful strategy to meet the region's need to invest in student-centered educational models that will better prepare the increasing number and diversity of students to innovate and accelerate regional prosperity.

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University Faculty

Making a Difference in Local Economies

BY NED STRONG

ONE OF MY FAVORITE THINGS TO DO IN THE cold New England months of January and February is to go to Wilson Farm in Lexington, Massachusetts, and marvel at the wide variety of out-of-season fresh fruit. I have always wondered where it comes from, how it made its way to Lexington, and who are the people responsible for it. The labels reveal that many varieties of grapes, berries, apples, peaches, avocados and other fresh fruits and produce come from Chile. Considering the distance between Chile and the United States, the above questions are even more intriguing. It turns out that fruit exports are now one of the top economic drivers in Chile and a model for other countries. But dominance in fruit exports has not just happened by chance. Today's success in this South American

country's fruit exports is the result of a history of wise investments in human capital and long-term successful international collaborations among universities.

In the 1960s very little fruit was exported from Chile. Principally apples were shipped north to New York and Philadelphia fruit markets in relatively small quantities and of questionable quality. Yet great potential existed. Climactic conditions in the country vary from moderate Mediterranean valleys ideal for grapes and wine to temperate zones perfect for apples and similar fruits. The fact that seasons are opposite to those of the northern hemisphere also add a huge potential for successful international trade. Production grew and the

Photo caption: *Dustinci as vendae*



Left: Wilson Farm entrance in Lexington, Mass. Right: Antonio Lizana, Dean of the Agronomy Faculty of the University of Chile, is one of the leading protagonists in Chile's phenomenal fruit export growth.

Chile-U.S. trade relationships strengthened. From 1970 to 1980, exports grew from 50,000 to 260,000 tons of fresh fruit annually. Today, that number has increased tenfold. This year over 2,500,000 tons of fresh fruit will leave Chile's harbors and airfields, roughly the weight of eight Empire State Buildings. There are nearly 8,000 producers and 750 export companies sending fruit to one hundred countries. Fresh fruit, mostly table grapes, avocados, and apples, makes up 31 percent of the agricultural export market. The largest markets for this production are the United States and Canada. According to the U.S. International Trade Commission, Chile fresh fruits made up 9 percent of all fruit and vegetable imports in the United States and is the third largest supplier behind Mexico and Canada. Export growth spike in the early 1980s resulted from new techniques in production, harvest, conservation, transportation and refrigeration.

HOW DID THIS HAPPEN?

I recently had the opportunity to speak with Antonio Lizana, the Dean of the Agronomy Faculty of the University of Chile, and one of the leading protagonists in this story. For three solid hours he related one of the most remarkable examples of international educational

cooperation in agricultural science. It all began with a chance encounter immediately following his graduation from the University of Chile in 1962. He was in Valparaiso, Chile's principal port, where he ran into his former professor testing apple density to determine if they could survive the long journey to market in the United States. After the professor explained details of harvest timing, variety resistance, time to market, etc., Lizana exclaimed, "Professor, why didn't you teach us that at the University?" From that moment, Lizana became fascinated by all that happens from the time crops are harvested until they reach someone's table.

His work eventually spurred the incredible growth of the fruit export market in Chile. He introduced a series of post-harvest technical visits to California for more than 400 producers in a period of 14 years. These visits gave them an opportunity to see how post-harvest systems worked and to gain deep understanding of the latest processes as well as the value of new technologies. For example, they saw how strawberries are cooled to zero degrees Celsius in the field and placed in special containers so that they will arrive fresh five days later in New York City. They also observed how Chilean fruit arrives in U.S. ports and how it compared in quality

to other products. They understood firsthand how fruits were sold and the quality demanded by international markets. These visits resulted in the introduction of the latest in post-harvest technology in Chile such as hydro-cooling, new refrigerated container technology, modified atmospheres, and new marketing systems. Lizana collaborated with producers to introduce these latest technologies and processes in Chile and, together, they transformed the fruit export industry.

But the story started back in the 1960s, when Lizana as a young student found there was no post-harvest biology and technology program in Chile. He won an Emery H. Powell Scholarship to study for a master's degree in post-harvest horticulture at Washington State University in Pullman, Washington. When he graduated in 1965, he returned as a faculty member to the University of Chile. His arrival coincided with the beginning of the Chile-California program, a groundbreaking initiative born out of the Alliance for Progress early in 1963 after President Kennedy suggested the initiative to Governor Edmund Brown as a way to harness technical expertise of California's leading universities to assist developing nations in the Americas. Under this program experts in many dis-

ciplines came to Chile from California universities and, eventually dozens of Chileans obtained advanced degrees in California. University of California Davis sent 11 experts in fruit production and export to Chile. As a newly arrived expert in the field, Lizana soon became one of the leading Chilean counterparts. He established a research and teaching program in post-harvest technology at the University of Chile; now students like him did not have to go abroad. Under Lizana's direction, the university also established the first postharvest laboratory in the country. Within a year, both initiatives were up and running. The new lab studied factors that influence the quality of fruit, the right moment to harvest fruit for export, types of climate control in storage, and how fruits deteriorate when they are exported. Most importantly, he applied these findings to the fledgling fruit export market through field-based research and outreach, reflecting his experience in Washington State and California's agricultural extension system.

By 1968, then Governor Ronald Reagan terminated the California-Chile agreement. The Ford Foundation stepped in and re-established the program with generous new financing focusing on fortifying human resources. That same year, Lizana won a Ford grant to UC Davis where he completed his Ph.D. in botany in 1974. After turning down job offers in post-harvest technology research in Mexico and as director of the prestigious Escuela Agrícola Panamericana at Zamorano in Honduras, Lizana returned to Chile to become the director of the Agricultural Production Department of the University of Chile. He created the Center for Postharvest Studies that offered intensive courses for hundreds of Chilean producers. The Center published guides and newsletters on all aspects of post-harvest issues. As a professor, Lizana supervised dozens of theses and research projects. He set up a second postharvest laboratory at Chile's Catholic University. Through his work at the university he has had a direct influence on more than 900 Chilean researchers in horticulture

and post-harvest studies. Countless other producers and export companies profited handsomely from his work as a professor, researcher and author.

In recognition of these accomplishments Lizana has received many honors, including the prestigious Golden Branch from the College of Engineers of Chile, and the presidency of the Agronomic Society of Chile and of the American Society for Tropical Horticulture. His reputation has grown far and wide both in Chile and abroad. He has traveled to Brazil, Argentina, Uruguay, Peru, Ecuador, Bolivia, Colombia, Costa Rica, El Salvador, Guatemala, South Africa, Spain, and Mexico to share his expertise on post-harvest management as a consultant and as a presenter in conferences.

This international experience reached its farthest point when Lizana was asked to duplicate his initiatives in Egypt under a joint program of the Egyptian government and USAID. He spent seven years there with a team of experts from Chile, establishing a successful post-harvest infrastructure that included upending many long-held agricultural practices in

grams and practical research. This experience became a model for him when he returned to Chile where he changed his own faculty and applied new technologies that transformed an entire industry.

It may be hard to say that Lizana would not have contributed equally to Chile's agricultural development had he not gone abroad early in his career. But there is a very strong correlation between his view of the world and his success as a leader. This international view, possibly a level of comfort in international dealings, began when he was a student at the University of Chile where he led Chilean students to the United States as part of the Experiment in International Living. This and his first-hand experience in agricultural extension at Washington State University, and his close professional and personal relations with UC Davis surely provided a firm foundation for Lizana's remarkable career.

International universities and their leaders are the key to multiplying this story. The current trend of accelerating international post-graduate studies through programs like Brazil's Sci-

Lizana was asked to duplicate his initiatives in Egypt under a joint program of the Egyptian government and USAID.

the fruit industry. He organized technical visits to the United States, Mexico, and Chile and trained 60 exporters and technicians at the University of Chile. Under his direction, Egypt's fruit exports to Europe grew from 100 tons per year to 40,000 tons from 1995 to 2000.

I asked Lizana what made a difference in his career and what influenced him most as the leader in this revolution. He said that the experience at Washington State opened his eyes about what universities should do to provide opportunities to students to learn and to innovate. There he learned how universities worked with producers through extension pro-

ence Without Borders, Becas Chile, and Peru's new program to send hundreds of future leaders abroad will contribute to a better future. Other efforts such as the famous Chile-California provide a successful model for the recently signed Chile-Massachusetts plan. The Chile fruit story provides concrete evidence of the exceptional value of international academic programs. They are the catalysts to create many others like Antonio Lizana.

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Doctorates, Colombian Style

Reflections of an Expatriate Political Scientist **BY ANN MASON**

“YOU DO KNOW THIS WILL BE THE KISS OF death to your academic career” was the unenthusiastic response of my adviser to the news that I was going to marry a classmate and move to his native Colombia. It was 1990 and I was ABD in Yale’s doctoral program in political science. I wasn’t particularly concerned with turning my back on the rarified world of academia in the United States. I was in love, I was primed for adventure, and I was confident that I had a bright scholarly future awaiting me in Colombia, my adviser’s skepticism of academe in a developing country and my rudimentary Spanish skills notwithstanding.

Three babies, three international moves and a dissertation later, I joined the political science faculty of the Universidad de los Andes in Bogotá. For most new Ph.D.s, the contrast between the theoretical and abstruse world of doctoral programs and first appointments

with lots of undergraduate students and a large teaching load can come as quite a shock. In my case, this difference was compounded by strikingly divergent academic cultures. If political science in the United States was lofty and somewhat detached from reality, political science in Colombia was right in the thick of daily social and political life.

I had a hard time getting traction at Universidad de los Andes with my training, which had been very focused on the discipline itself: political science for political science’s sake. While my new colleagues were drafting columns for newspapers, moonlighting at NGOs, and dashing off to give congressional testimony, my instinct was to turn the conversation back to the intellectual safety of theories and models.

The Colombian social science environment is part and parcel of the world it studies. Historians, anthropologists,

sociologists and political scientists, with advanced training from top universities both national and international, routinely jump into the fray of public debate. They revel in their role as scholar-practitioners and as political activists. The science of explaining and forecasting often takes a back seat to more urgent responsibilities, such as shaping the nation’s agenda, proposing solutions to persistent poverty, social inequality and violence, and helping end one of the most virulent and intractable internal conflicts in the world.

There are of course some U.S. social scientists who go in and out of government service and others who have permanently migrated from the academy into the private sector or policy-making sphere. With some notable exceptions, though, it is not unusual to hear such U.S. academics disparaged for no longer producing *bona fide* scholarly work or for “selling out.” This concept is strikingly absent in Colombia.

University professors consider themselves public intellectuals, eagerly using their training in the service of society.

During my eight years at los Andes I gradually came to understand that political science's relevance and contribution are highly contingent on the context in which the discipline is practiced. Through this experience I now have a deep appreciation for applied learning and research. Following my appointment as the Director of the Fulbright program in Bogota in 2006, my crash course in Colombian style political science would serve as the basis for ongoing reflections about the purpose of advanced learning and the role of Ph.D.s in the developing world. The Fulbright program, with its commitment to knowledge in the benefit of humanity, is a laboratory for applied scholarship. I continue to grapple with a number of issues related both to the value and impact of Ph.D. training and scholarly work in Colombia.

Doctorates in Colombia are on the rise. The nation's shift toward a science- and technology-based growth strategy has led to a corresponding increase in R&D spending and the need for research capabilities, as well as an escalation in the number of Ph.D.s and doctoral programs in Colombian universities, obvious prerequisites for innovation, scientific discovery and economic development. Colombia produces approximately 2.3 Ph.D.s per million inhabitants, a six-fold increase over the past decade, although still below other countries in the region. This proportion is insufficient to meet the country's growing research needs. Colombian universities currently offer a total of 169 accredited doctoral programs; nearly double the figure only five years earlier. In leading public and private universities with major research programs, a doctorate is now a prerequisite for a career in academia, with a significant number of new faculty hired directly upon receiving the Ph.D..

This has led to something of a mad dash among traditional teaching universities and even technical institutes to join the research and Ph.D. bandwagon.

Universities encourage professors on a teaching track with a master's or diploma degree to do a doctorate, develop research agendas and even open doctoral programs. The development of research competencies can upgrade scholarship and invigorate teaching. Likewise, home-grown Ph.D. programs are more likely to promote research that focuses on local problems and needs. Still, as doctoral programs and Ph.D.s become the new credential, there is a potential of diverting scarce resources and capacities from the instructional mission of higher education, especially in some of Colombia's regions. It is not realistic, or desirable, for all Colombian universities to aspire to research institution status. Such a change risks downgrading the importance of preparing citizens for professional and technical careers in the private sector, government and civil society.

This shift to research and doctoral training by Colombia's universities also raises questions regarding how scholarship is evaluated and weighed. While many universities accept independent peer review as a valid control of academic quality, the "publish or perish" model of scholarly validation that reigns in the United States has been embraced only partially. Considerable controversy continues about who are considered the legitimate gatekeepers of the discipline and the relative importance of publications and peer review to faculty advancement.

International peer-reviewed journals are not universally recognized in Colombia as the *sine qua non* of social science rigor. Although top ranked universities value the prestige associated with publishing in leading scientific journals, national publications with local experts and review processes more attuned to autochthonous scholarship are also recognized as a valid imprimatur of both the quality and the importance of findings. That Spanish-language manuscripts are barred from international academic vetting only strengthens the legitimacy of Colombian peer review. In Colombia's major research universities, peer-reviewed publications do play an



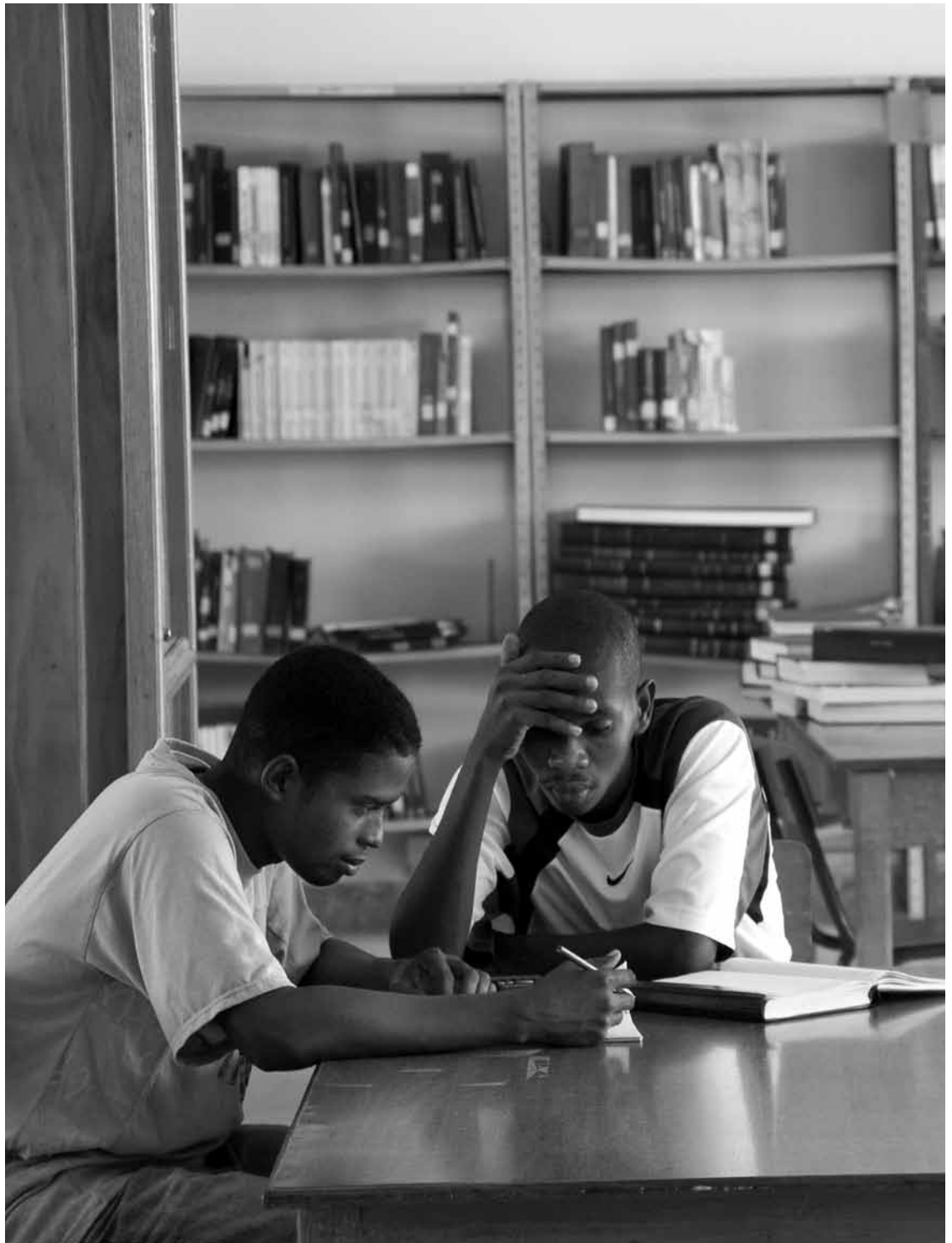


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increasingly important role in faculty evaluations and promotion. Unsurprisingly, where teaching undergraduates continues to be at the core of the university purpose, the “publish or perish” mandate is weak. Of concern in this model of judging academic performance is that it neither evaluates the real impact of the research itself, nor does it reward professors who engage in other vital activities within the university, including teaching and mentorship.

Another thorny issue surrounding doctoral training and impact relates to the location from which Ph.D.s are most able to contribute to the country’s research and development needs. A fundamental tenet of the Fulbright program worldwide is the requirement for U.S. trained professionals and academics to return to their country of origin upon finishing their degrees and related activities. The Fulbright officers’ thinking, shared by Colombian government entities such as Colciencias that also sponsor graduate studies, is that the best way to harness the knowledge and research skills of citizens who do doctoral work in the United States is through their return to Colombia.

Today, of course, it is feasible for researchers from all corners of the globe to achieve local impact. In fact, one could argue that having Colombian academics strategically located in universities and research facilities around the world is instrumental to the development of institutional ties, research networks and collaborations. According to this point of view, transnational processes and global knowledge communities make the concept of brain drain obsolete.

Nevertheless, I’m still a true believer in the importance of space and physicality. The day-to-day experience of living in Colombia provides a social and political backdrop to our work as scientists and researchers. Being in Colombia exerts a powerful influence on research agendas and is a constant reminder of the need to produce findings that can be applied to solving local problems and improving lives. Ph.D.s with appointments at Colombian universities are more likely

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to engage in capacity building, build national research networks, and teach and train a new generation of students with global competencies, all fundamental to the goals of internationalization. Furthermore, the ability to benefit from Colombian scientists and researchers abroad presupposes that the country has the institutional capacity to identify and reach out to its academic diaspora. This continues to evolve, of course, but for now I maintain that the requirement that Colombians return home after completing doctoral and postdoctoral work will generally serve to maximize the impact they are able to achieve.

I suppose my adviser was right in that my relocation to Colombia *did* put an end to any aspirations I may have had to an academic career in the United States. No matter. I believe that my experience in Colombia, where academia continues to be more oriented to meeting society’s needs than to making scholarly contributions to the discipline, has been more meaningful. At the end of the day, scholarship’s greatest application is to help create more prosperous, peaceful and equal societies. Taking my political science career to Colombia was not the kiss of death. On the contrary, it was the kiss that transformed the frog into a handsome prince.

Ann Mason is the Director of the Fulbright program in Colombia, where she has lived for 18 years. She previously was Professor and Chair of the Political Science Department at the Universidad de los Andes in Bogota. She holds a Ph.D. in political science from Yale University.





The MECESUP Program in Chile

15 Years Supporting Higher Education Quality Improvement **BY RICARDO REICH**

AS THE RAIN POURED DOWN ON A GLOOMY DAY in Concepción that June in 1997, I received a rather unexpected phone call from the Ministry of Education. I had just ended an eight-year stretch as vice-president of research at Universidad de Concepción in the south of Chile and was thinking about how to restart my academic career in chemical engineering. On the other end of the phone was the Head of Higher Education, inviting me to implement a new Higher Education Quality Improvement Program, sponsored by the World Bank and christened MECESUP (*Mejoramiento de la Equidad y Calidad en la Educación Superior*). The invitation was surprising, in part because Chile is so centralized in the capital, Santiago, 270 miles away. I saw this honor as a great opportunity to contribute to higher education development in our country. So I accepted, and now have led the MECESUP Program under four different administrations.

I saw this honor as a great opportunity to contribute to higher education development in our country.

Back in 1988, higher education funding was mainly allocated on the basis of historical criteria, with no public accountability. By 1990, an Institutional Development Fund had begun operations; however, accountability still wasn't a requirement. Only research funds from the National Research Council (CONICYT) were allocated on a competitive basis and involved a certain degree of evaluation.

At that time, most universities took neither strategic nor long-term planning into consideration. Performance information was inconsistent and not readily available. Not only were retention and graduation

rates absent—they were often taboo to discuss. And, of course, no one wanted to mention that most Chilean universities fell below international standards.

Today, MECESUP aims to provide that quality control. Housed in the Department of Institutional Financing at the Division of Higher Education, it has a much more complex structure and scope than when it was first conceived.

When MECESUP started, the Chilean system was—and still is—deregulated and of uneven quality. Although back then no quality assurance existed on a national scale, self-assessment with external peer reviewing had begun in 1990 for university licensing—after which universities could make independent decisions about their functioning without supervision from government authorities. In 1993, peer reviewing at the Universidad de Concepción and Universidad de Chile also began in order to improve institutional academic quality. Undoubtedly,

this was the dawn of higher education quality assurance in Chile.

When the government decided, in collaboration with the World Bank, to set up MECESUP, it took place in the midst of a marked increase in university enrollment (from 250,000 students in 1990 to 1,070,000 in 2011). The Program funded the overall improvement of academic infrastructure at the 25 “traditional” institutions of the Council of Chilean Universities (CRUCH)—private and public universities with partial state funding nationwide. This resulted in a significant increase in equity of access to quality in

higher education institutions throughout the country. The MECESUP Program also factored in a capacity-building component, the design and pilot implementation of a voluntary accreditation process for degree programs, the design and implementation of a Competitive Innovation Fund that would replace the 1990 Institutional Development Fund and the introduction of accountability measures. The total investment was US\$245 million over five years.

PHASE I. RECOVERY OF ACADEMIC INFRASTRUCTURE AND QUALITY ASSESSMENT

The first phase implementation sought to both restore and improve higher education academic infrastructure, to support institutional capacity building and introduce accountability. Eligibility was limited to CRUCH universities and vocational institutions.

The accreditation system was designed and then put into practice bit-by-bit, learning from the experiences of the licensing processes, as well as leading international experiences. The CRUCH universities strongly supported the process from the beginning. Later, in 2005, the process was extended to institutional accreditation. Universities had to learn to assess themselves and to submit quality improvement proposals to the Competitive Fund. Eligibility and selection criteria were laid out clearly with an emphasis on the stimulation of innovation and the development of new solutions. This process ensured strong ownership of reforms at a decentralized level and enabled institutions to identify weaknesses and appropriate solutions. Funding incentives for quality improvement, in turn, provided opportunities for corrective actions. Today, institutional and program accreditation is implemented by the National



Accreditation Commission, which legally started operating in 2007.

The Competitive Fund began to support enhanced teacher and student learning, doctoral program development and management capacity building in universities. This included library modernization, more spaces for student learning, information access and management, integration of information technology into programs for better learning, new laboratory equipment and technologies, modern lecture rooms, use of multimedia, new science instrumentation and doctoral scholarships. In Phase I, the general hypothesis was that investment in academic infrastructure would improve teaching and learning and, therefore, employability to graduates.

As an institutional capacity building instrument, the Competitive Fund was the first organization in Chile to introduce accountability measures that led to long-term and strategic planning and management through well-designed proposals and monitoring and evaluation of results and impact.

This Fund, after five years of convocations and competitions, supported 400

projects with a grant investment averaging US\$ 550,000. Regional universities outside Santiago received 70 percent of the total amount for undergraduate support. Improvement and development of new doctoral programs accounted for 20 percent of the investments, and the remaining 10 percent for vocational education to improve teaching and learning in technological areas needed by the productive sector.

PHASE II. PERFORMANCE-BASED PILOT PROGRAM

The next stage was to allocate funds to institutions according to the results of their management. Eligibility was extended to new private universities in a limited number of specific areas related to teacher training and doctoral programs.

With the implementation of the MECESUP Program, the Chilean higher education system had made significant changes and improvements. However, the Competitive Fund—the sole incremental funding allocation mechanism—had showed some weaknesses. One of these was the difficulty of addressing complex institutional issues such as strategic

New engineering facility in Universidad de Magallanes (in Punta Arenas, 3,860 km from Arica; 70% of Mecesup resources were allocated to regional institutions)

planning, extent of impact on student learning and employability, and overall management improvement.

In 2005, as a result of lessons learned during implementation, the government decided to complement the Competitive Fund with a pilot program that would target changes at the institutional level. For this second phase, it signed another agreement with the World Bank (Loan 7317-CH). The level of funding was maintained at US\$50 million per year.

The former Competitive Fund became the Academic Innovation Fund. Between 2006 and 2008, it funded 371 projects. Strong emphasis was placed on staff development and doctoral programs, moving away from a teacher-centered undergraduate educational model to a student-centered learning one, continuing support of innovation in academia, and improving academic management through institutional research and academic staff training.

New library at Universidad de Tarapacá (in Arica, close to the Northern border). All CRUCH university libraries were modernized or built new: new architectural designs for better learning; open shelves; many study areas and rooms; full Wi-Fi.

For the first time, pilot performance-based agreements had been negotiated and agreed upon with the Universidad de Tarapacá (in Arica), the Universidad del Bío-Bío (in Concepción), the Universidad de La Frontera (in Temuco) and the Universidad de Chile (in Santiago). The agreements, with a budget of US\$20 million, were signed for a three-year period in 2007. After a successful international mid-term evaluation in 2010, the agreements finally ended during the first semester of 2011 with notable outcomes. The international evaluation recommended the expansion of the program to reach more institutions and produce faster and deeper change. Also, in 2008, special resources (US\$72 million) were designated for the improvement of humanities, social sciences and arts at the Universidad de Chile and five other state universities. These incremental funds were negotiated and allocated under the same performance-based funding model; the institutional improvement plans are presently being implemented.

PHASE III. PERFORMANCE-BASED AGREEMENT EXPANSION

Beginning in 2010, the current government has scaled up the performance-based agreement pilot and financing model to a new program to be implemented during 2012-2016. The plan is to allocate a “set-aside” fund of about US\$90 million per year to provide incentives for faster institutional changes in areas of specific public policy priorities.

The main focus will be the improvement of teacher training institutions and programs, the re-design of the undergraduate curriculum, the improvement of doctoral programs with a focus on internationalization and innovation, the up-

grade of the vocational education sector and the synergy of regional higher education institutions with their stakeholders. All Chilean higher education institutions that have been granted full institutional accreditation will be eligible.

This program will form part of a new agreement with the World Bank for the support of Tertiary Education in Chile, to take effect in the second half of 2012. The new loan—and significant state funding—will support performance goals, the adoption of best international practices, consulting costs, and quality assurance. The impact of these important national and institutional efforts will hopefully be felt in positive results during the next five to ten years. Chile urgently needs positive outcomes in education and innovation in order to increase its global competitiveness.

Ricardo Reich is a chemical engineer with a PhD from the Georgia Institute of Technology. He has spent his entire academic career at Universidad de Concepción in Chile, where he also served as Vice-President of Research for more than 10 years. At the Chilean Ministry of Education he assisted with the initial design and implementation of the MECESUP Program. Today he acts as Head of the Department of Institutional Financing in Higher Education. He can be contacted at ricardo.reich@mineduc.cl. Specific information on the performance-based financing model used in Chile, lessons learned during its implementation and two specific publications (in English) can be found on the MECESUP website <http://www.mecesup.cl> or by contacting the author.



Strengthening Teaching and Learning in Latin America

Preliminary Lessons **BY PETER DESHAZO AND ANGÉLICA NATERA**

IN APRIL 2006, CHILEAN HIGH SCHOOL students took to the streets demonstrating against the cost and quality of public education, startling the newly-elected government of President Michele Bachelet. A further wave of protests by both high school and university students in 2011 and 2012, aimed now at the government of Sebastián Piñera, focused on similar complaints. With Chile among the highest-ranking countries in Latin America in terms of primary and secondary school enrollment, these protests were unexpected in some circles.

In hindsight, however, the Chilean protests underscore the deep and growing dissatisfaction with the quality of education available to many Latin Americans. Great disparities exist between the often high-quality teaching and learning opportunities afforded elite groups in Latin America and what is accessible to less privileged sectors of society. This reality spans the academic network, from pre-school to university graduate education. Students from elite, mostly private, and often expensive secondary schools are best positioned to gain admission to top universities in the region, where their education is often free of charge. Less advantaged students have limited opportunities. The result is a perpetuation of the deep socio-economic inequalities that mark most Latin American societies.

Access to secondary education, until recently a privilege of the upper- and middle- classes in Latin America, is now widespread. Primary school attendance is nearly universal and more and more students are now attending high school. Although significant numbers of students in the region still fail to complete secondary school, the pool of graduates seeking higher education has grown significantly.

This has led to what some observers call the “massification” of higher education in Latin America. Enrollments in universities and other centers of higher education have risen substantially from the mid-1970s to the present, accompanied by a proliferation of new centers of higher education in the region, many of them private universities. Students from non-elite backgrounds have broader access to higher education than ever before, but university education in Latin America is not yet a prime vehicle for reducing inequality and harnessing more broad-based opportunity for economic advancement. The human resource base in terms of teaching and research staff available at the higher education level has not kept pace with the proliferation

education will no longer serve the human resource needs of the Americas. Regional economies require more highly-qualified persons across a broad band of activities, especially in areas related to science and technology. Brazil’s recent initiative to provide more than 100,000 students and researchers with opportunity for international study under the ambitious “Science without Borders” program is a dynamic response to this challenge. Across the region, governments, universities, and increasingly private sector organizations are examining how the quality of education can be enhanced at all levels. There is more focus on the need to strengthen the region’s low rates of investment in research and development and to promote technological and academic innovation.

The human resource base in terms of teaching and research staff available at the higher education level has not kept pace with the proliferation of centers of higher education.

of centers of higher education. While top-tier universities in several countries in the region provide very high quality instruction, many others do not have access to well-prepared faculty. The result is often the confluence of students from disadvantaged economic backgrounds with modest secondary school preparation and higher education programs unable to offer them relevant and high-quality instruction.

Increasingly, however, a movement toward academic reform is taking hold in the region, driven by the awareness that simple access to primary and secondary

LASPAU: Academic and Professional Programs for the Americas, affiliated with Harvard University, has been dedicated to the mission of strengthening higher education in the Western Hemisphere since the organization’s founding in 1964. Much of LASPAU’s work has been concentrated in the area of scholarship administration, providing a full array of services to organizations throughout the Americas in support of mainly graduate-level study by Latin American and Caribbean students in the United States and other countries. The scholarship programs administered by LASPAU over the years include the



Left: Chilean university professors at a LASPAU Program. Right: Professors of Education from the Dominican Republic at a LASPAU Program.

Fulbright Program for the U.S. Department of State, USAID scholarships, and scholarships funded by the Organization of American States (OAS) and by governments of many countries in the region. More than 20,000 students, researchers, scholars, and professionals from the Americas have participated in programs designed or administered by LASPAU. Most recently, in 2012, LASPAU signed agreements with entities of the Ministry of Education and the Ministry of Science, Technology, and Innovation of Brazil—the Federal Agency for Support and Evaluation of Graduate Education (CAPES) and the National Council for Scientific and Technological Development (CNPq), respectively—to administer 1,500 Ph.D. scholarships at U.S. universities under the “Science without Borders” initiative.

LASPAU has most recently focused on the need to promote academic innovation and strengthen teaching and learning capability in the region. In 2006 the organization launched the Initiative for

the Development of Academic Innovation (IDIA, by its Spanish acronym), as the focal point for this effort. IDIA helps universities in assisting students to learn more effectively by designing multi-phased programs. It also fosters academic innovation at universities in Latin America and the Caribbean. Through tailored programs and initiatives in support of higher quality education, IDIA promotes outcomes-based curriculum design, new approaches to student learning assessment, effective teaching and learning in STEM (Science, Technology, Engineering and Mathematics) fields, and greater synergy between the academic, business, and public sectors in the region. IDIA also contributes to improving the education of future teachers by strengthening pedagogical skills of faculty of schools of education. IDIA’s goal is to promote practical, sustainable strategies and initiatives with measurable results.

IDIA has worked with individuals from more than 170 organizations including government entities, universities, and

foundations from 21 Latin American and Caribbean countries on efforts to promote improvements in teaching and learning and academic innovation. Thousands of professors from public and private universities have benefited from IDIA programs—often carried out in Cambridge, Massachusetts—linking them with Harvard University and with many other top universities in the United States. Through its six years of experience in creating a regional network of experts in university teaching and learning, IDIA has learned some preliminary lessons regarding the key variables linked to more effective teaching and learning and the mechanisms for sustaining such improvements.

PRELIMINARY LESSONS

1. Focus on aligning faculty development with broader institutional goals. Strengthening the quality of university teaching and learning implies a change in institutional culture. Thus, it requires a strategy that maximizes likelihood for support



from all actors within the organization. Some common strategic elements we have observed from successful faculty development efforts include:

- Consideration of the institution's unique needs and characteristics
- A designated agent of change within the institution who is empowered to undertake needed changes, including creating a formal structure (i.e. a named program, entity, or academic area) responsible for the process and holding accountable other entities within the institution
- The development of a small but successful pilot program during the early stages of implementation that shows early success through measurable outcomes

2. Build faculty support for change. It is essential that there be faculty support for academic innovation and change related to teaching methods. Experience demonstrates that most faculty members will welcome opportunities to improve their teaching if changes are not perceived as

imposed or threatening to their professional standing. Successful efforts at innovation offer opportunities for professors to reflect on their conceptions and practices related to teaching and learning and then provide the needed training and support. This is an essential challenge for university leadership—to develop an environment of teaching innovation that is seen as an integral part of academic life.

3. Use a multi-dimensional approach. An understanding of what pedagogical improvement entails is necessary in order to develop a culture of effective teaching and learning. This approach consists of an integrated instructional design that includes an established conceptual framework for teaching and learning—one that examines course design, learning assessment, teaching approaches, and the development of student competencies. The overall goal of the training program should be to strengthen the institution's capacity to improve teaching

and learning along several dimensions, not merely to provide training in teaching methodology or use of technology.

4. Collect useful data. The importance of data collection is directly linked to the implementation of teaching improvements and the assessment of its impact on student learning. Data collection is essential not only for professors to be informed about their teaching practices, but also for institutions to make evidence-based decisions about strategies to improve teaching. The creation of educational research groups within university schools and departments is a concrete step that several institutions are taking toward building sustainable efforts to improve teaching.

5. Share knowledge and best practices. An important goal of IDIA's work has been to facilitate a network of educational experts around the region and within individual countries that promote academic

innovation. Within institutions, the creation of such networks is highly beneficial in encouraging faculty to share knowledge and best practices and to form teams that can facilitate further innovation and measure progress. Encouraging class observations among faculty and examining teaching approaches in other disciplines fosters an environment where teaching improvement is promoted

In the context of a globalized world economy and greater synergy between universities, government, and the private sector in Latin America, the quality of higher education is certain to be a key point of future focus. With its nearly fifty years of experience in the region and its dedication to promoting innovation and academic excellence, LASPAU looks forward to further strengthening partnerships with organizations throughout the Americas that share this goal.

Peter DeShazo is Executive Director of LASPAU: Academic and Professional Programs for the Americas, affiliated with Harvard University. Before coming to LASPAU in 2011, he was director of the Americas Program at the Center for Strategic and International Studies (CSIS) in Washington D.C. and taught at the School of Advanced International Studies (SAIS) of Johns Hopkins University.

Angélica Natera is the Associate Director for Academic Innovation at LASPAU: Academic and Professional Programs for the Americas, affiliated with Harvard University. Since 2006, Angélica has led IDIA, the Initiative for the Development of Academic Innovation, which has benefited over a thousand professors in Latin America and the Caribbean. She is a graduate of Universidad Tecnológica del Centro and Universidad Simón Bolívar in Venezuela and of Harvard University.

Venezuela: Forging Knowledge

Students as Entrepreneurs in Training

BY CÉSAR PEÑA VIGAS

HOW DOES A STUDENT FIGURE OUT HOW TO BE a petroleum engineer or a social worker? The traditional path is to study, then get an internship and finally go out into the real world. At the Universidad Tecnológica del Centro (UNITEC) in Valencia, Venezuela, we have incorporated work experience and entrepreneurship from the very beginning of a student's studies with the idea of making students more competent in the world of professionals, business and government. Engaged students make the most of their education.

Our project-based process makes students "entrepreneurs of their own learning." In these new roles, which apply both to teachers and students, talent is the reigning drive in the design and operation of university activities. The instruction method known as project-based learning isn't new, but in Latin America, it's quite innovative. It uses student teamwork to solve problems while working with professors as facilitators and bringing in outside experts.

Thus an engineering student might start to ask questions about how to design a project for regions where flooding occurs. Following up, he or she might first consult architecture students and professors, perhaps propose new courses on the subject, bring in experts from engineering, architecture and even environment, take traditional courses related to the problem, and then form professional-student teams to test the theories.

We guide our students through professional training led by business consultants with expertise relevant to each particular case. Thus, one aspect of our job as a university is to help organize learning plans developed through students' initiative,

as well as to develop networks and stimulate the generation of new ideas. We go beyond the regular classroom to bring more effective learning with both academic and hands-on labor aims.

Such a modular concept of university management also makes the participation of students more horizontal and central. Teams of students get involved in projects of economic utility, seeking practical results. They are evaluated on the activities associated with their learning goals. The student entrepreneur in charge of his or her own learning assumes extracurricular risks beyond standard coursework, and risk-taking is encouraged, since the evaluation of learning goes beyond a simple evaluation of grades.

ADMINISTRATION OF TALENT

Talent is a constructive and creative force both in society in general and in higher education in particular. To take advantage of talent is to devise tasks and programs that convert the efforts to learn and conduct research into results that benefit society. Taking advantage of talent is an ideological principle and a practical guide to achieving value from an academic education.

Effective university management seeks to develop talent, rather than just settle for formal educational programs. Students and professors come together to confront the complexity of the modern world and to offer solutions for improving conditions for future lives. For example, look at the enormous complexity of the environment, an area that is of enormous interest to all professions, which need to master at least the basic knowledge and capabilities of how to manage the environment on a daily basis.



A student should have enough freedom to choose, construct his or her own path of learning and to count on work teams to boost individual effort. Risk-taking is one of the opportunity costs of freely elected learning.

Learning tasks have no set limits; rather, limits are determined by the quality of the work and available resources. For the last thirty years, UNITEC has extended the limits and speed of learning well beyond the formal demands of professors and even of the university itself. Students set the highest limits.

A significant part of the administration of talent is conventional learning, as is the formal evaluation of that experience. Project-based learning encourages the construction and applications of models that make teaching more effective; it stretches the limits of learning and enhances the stimulation of evaluations.

A student's learning plan should lead

to a value commensurate with the resources invested in it, and the results obtained should continually help to evaluate the effects of the university.

Independent learning—the most appreciated and ambitious goal of any educational project—stimulates construction of solid relations with others, building social capital that results in favorable conditions for more learning and for the development of business or labor networks.

CREATING THE NEED FOR LEARNING

Students discover the need to learn from observation and the effort to understand unfamiliar subjects. This understanding may be partial or complementary when some aspects of the subject matter are familiar, or the area may be totally unknown.

The task of the university is to place students in situations in which they do not feel firmly grounded and to help

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them develop specific questions that they need to answer in order to learn from the situation.

Creating the need for learning places the students—and implicitly the professors—into situations they know little or nothing about. They must recognize what they ought to learn and begin to do so; in this way, they discover other gaps in their knowledge, manage to plug those gaps, and then see that there is something else they need to know. It is hoped that this awareness of the need to learn will stay with them for their lifetime, and that there will always be some learning left to do—welcome and always understood as positive reinforcement.

Students—preferably on their own—

should eventually be able to develop answers to the questions that arise during their learning exercises. These answers may be partial or incomplete, but they will keep on trying to get better answers.

An ideal outcome for the UNITEC model is that the need to learn, upon becoming evident, will be satisfied by taking an appropriate course as soon as possible. Another desirable scenario is that lifetime learning become available. In the context of this curriculum model, the needs for learning are like the seeds of a whole that is not yet defined, but will gradually come into being through the process of learning. There is no one road to learning: paths include courses, learning initiatives, one or more projects, humanistic studies, and opportunities to think and to act creatively while acquiring the tools to organize one's own learning and gain the support of others in teamwork.

LEARNING INITIATIVES

Within this model, students learn to design courses with academic value and to develop content. Later, they can select a tutor who will guide them, and receive recommendations from the university to improve their learning, as well as approval of their work. This acceptance becomes part of the evaluation of academic performance in a percentage more or less equivalent to 12 percent of the total grade in any determined academic period.

Learning through initiative, however, only complements, rather than substitutes, for conventional systems of study in which the student receives mandated content and needs to demonstrate what he or she has learned.

This model implicitly encourages projects and other practices of a professional type with students and tutors ready to confront the needs to learn new skills. It attempts to create initial consciousness of problems, rather than final solutions, so that students as well as professors can figure out future programs of learning. Results obtained over the last thirty years have shown the predominance of student initiatives in many different areas, includ-

ing history, art and literature, and to a lesser degree, technical specialties.

The experience of learning through initiative includes work sessions, with frequent lectures by experts invited by the students themselves to talk about new trends in specific fields. Marketing, management, computer science and humanities are the preferred topics.

CARRYING OUT PROJECTS

Student-led projects, directed by business consultants associated with the university for this purpose, develop themes in several fields, including humanities and interdisciplinary studies that contribute to professional development.

Projects also involve making up multidisciplinary work groups in which students from different fields can acquire awareness about content and reach of extraordinary tasks and gain practical experience.

In interviews, university alumni emphasize the enormous importance that these projects had in their professional development, pointing out that their experience has allowed them to try out new things in the labor force or business field.

UNITEC students incorporate the idea of being entrepreneurs of their own learning into their everyday life, and when they feel some gap exists in what the university offers, they use the entrepreneurial concept to demand a higher quality of education, professional performance and valuable relationships within and outside the university.

Carrying out projects with this model in mind reinforces throughout the course of studies the acquisition of basic work competencies, then professional competencies in each area of study and also emotional maturity. Even students who leave the university at the beginning of their studies have already developed some professional abilities.

KEY ROLES

Students who take on greater challenges than those taking ordinary courses are considered "practicing" professionals who are preparing themselves better.

They receive opportunities to participate in learning situations of a professional nature, and with this, to stimulate the development of the needs to learn. Other components of this value chain are the following:

- To acquire a sense of professional risk;
- To better appreciate learning;
- To use available information as part of a continuous and inevitable process of answering questions;
- To submit on a regular basis to the judgment of other than their professors in academic disciplines;
- To more adequately evaluate data and information with a statistical basis;
- To give key roles to students in order to give them a sense of importance, of emulation of outstanding role models and to provide a context in which their decisions can have accepted value and a foreseeable effect;
- To outline and formulate a life project filled with components tied to the university and the general environment.

For example, outstanding students play a key role in the processes of integrating new students to the university. The idea is that new students will eventually also contribute to projects with social utility, so they must be carefully selected and prepared.

The exceptional students may also serve as representatives of students and professors in important activities outside the university.

This model can be used in the design of new universities, as well as in reforms of existing universities. It has already been applied at several universities, following the example of UNITEC. The model can be implemented in stages and in a partial manner. It's important to point out that it's possible to take advantage of its ideas and concepts within an existing curriculum, without requiring any administrative overhaul.

César Peña Vigas is president of the UNITEC Foundation and the founding rector of the Universidad Tecnológica del Centro (UNITEC) in Valencia, Venezuela.



ACCESS AND ACCOUNTABILITY

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In the Eye of the Beholder

Pursuing Quality in Latin America

BY LIZ REISBERG AND IVÁN PACHECO

IT'S RIDICULOUS TO IMAGINE THAT ANYONE would want poor quality from any product or service that they needed. So, not surprisingly, the many “consumers” of higher education want good, if not outstanding, quality as well. But what does that mean exactly? It's relatively simple to define a good-quality automobile—comfortable, reliable, safe, efficient to operate. A good-quality meal—its taste, service, presentation, value. A good-quality computer—fast, doesn't crash, easy to use, well designed. Consensus about the definition of quality for education in general, and higher education in particular, is more elusive. Is it about learning career skills? Learning life skills? Is it about finding a job upon graduation in the student's field of study? Is it about having access to appropriate academic resources and technology?

The elusive definition of quality for higher education has stymied policymakers and scholars alike, yet, during the last several decades, most countries throughout the world have established quality assurance systems, even without reaching consensus about the meaning of quality. In other words, this would be like producing a car without being completely sure of what you want it to do on the road.

Despite the ambiguity of definition and goals, accreditation agencies along with new demands for accountability have been established throughout Latin America (as elsewhere) since the early 1990s. These new systems have emerged in response to pressure from the World Bank, as a reaction to public skepticism about university output and as a key mechanism for facilitating international collaborations. Today, quality assurance systems in the region are operating almost everywhere and are increasingly accepted

for their inevitability and importance.

NEW REALITIES AND THE NEED FOR GREATER ACCOUNTABILITY

Why the interest in accreditation and concern for greater accountability? In part, this is because Latin American nations, as most of the developing world, were facing dramatic changes in enrollment including growing graduation rates from secondary school—meaning more students aspiring to higher education—and a growing belief that higher education is the best way for individuals and societies to progress. This put considerable pressure on the limited capacity of governments and existing higher education institutions. Governments responded in different ways—increasing the enrollment at public universities, creating new public universities, removing barriers to the creation of private universities, permitting foreign universities to offer degree programs, and often, all of the above. The rapid growth of systems presented many new challenges.

With the emergence of so many new providers and increased access for students who did not belong to the traditional elites, quality became a growing concern. In many countries, institutions seemed to appear overnight, often referred to as “garage universities” because of their limited infrastructure and staff. Many of these new private academies operated for-profit, with business targets given priority over educational objectives. The mounting prevalence of low-quality private providers and the increased number of students whose sole objective was a credential posed the risk of diluting the value of a university title.

By the end of the 1980s the university problem in many Latin American

countries seemed out of control, to the dismay of an increasingly dubious public. Particularly concerning was the skepticism of employers who relied on a university degree as a validation of professional knowledge and preparation. Governments were not prepared for this new reality. Traditionally, ministries of education had limited their oversight to the review of degree requirements and setting qualifications and expectations for professors. This was no longer sufficient. Some governments responded with new regulations that failed because the muscle necessary to enforce them wasn't there. The strict-regulation approach also butted against the huge wall of institutional autonomy, something considered sacrosanct by Latin American universities. The mere notion of requiring accountability to external agencies trespassed on the notion of autonomy for many individuals within the academy and resulted in acrimonious debate.

Ultimately, nearly every country in the region created a new agency responsible for evaluating and monitoring university quality. Additional tensions mounted as the implementation of new quality assurance schemes faced inevitable difficulties. Many of the new agencies were created by legislative bodies with limited expertise and knowledge of quality assurance systems for higher education. Legislation created structures and timetables that were often underfunded and unrealistic. As a result, new systems encountered logistical problems, training and staffing issues, infrastructure inadequacies and data collection difficulties. Early problems caused additional frustrations and added to the tensions between the universities and the new quality assurance agencies.

INTERNATIONAL CREDIBILITY

At first, the need to validate the quality of university activity responded to a national demand. However, the growing international integration of Latin America soon made it important for university credentials to have international validity. When no national systems of accreditation existed, a number of top universities in the region pursued accreditation from abroad and have continued to do so. Institutions such as the Tecnológico de Monterrey and the Universidad de las Américas in Mexico have received regional accreditation from the Southern Association of Schools and Colleges in the United States. Engineering programs at the Universidad del Norte in Colombia and the Pontificia Universidad Católica de Chile and many others have earned accreditation from the Accreditation Board for Engineering and Technology (ABET), also based in the United States. Many business schools are accredited by the U.S.-based Association to Advance Collegiate Schools of Business (AACSB) or the European Quality Improvement System (EQUIS). In many countries, international accreditation is considered more prestigious than local accreditation, although one has to wonder whether foreign standards are always relevant or the most appropriate measures to use.

There is also a growing convergence of quality assurance activities worldwide. International organizations like UNESCO and the International Network for Quality Assurance Agencies in Higher Education (INQAAHE) and regional organizations like the Red Iberoamericana para la Acreditación de Calidad de la Educación Superior (RIACES) are sharing experience and best practices that contribute to the recognition and acceptance of international benchmarks. These organizations and discussions will facilitate the mutual recognition of nationally accredited degrees in the future and facilitate the mobility of professionals and scholars.

Photo caption: *Dustinci as vendae verum consequaspel int que volectus et est magni*



MATURING SYSTEMS

Despite the initial resistance to (and sometimes rejection of) new quality assurance schemes, accreditation provided the solution for many of the growing problems of system expansion. It has proven to be less of a threat to autonomy than anticipated, as it is based on the concept of review by academic peers, not bureaucrats; it is conducted by an accreditation agency, not the government; and it is often a voluntary process.

Furthermore, quality assurance systems evolve. Initially, many systems copied accreditation models in play elsewhere and incorporated standards and objectives from abroad. Most of the new agencies have responded to the concerns and complaints that have come from local universities and adapted practices to local needs. As a result, organization, focus, and practices generally change with the maturity of the system.

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Predictably, quality assurance schemes start by measuring what can be measured. This was true in the United States and Europe, and it has certainly been true in Latin America. Typically, this means collecting a lot of quantitative data—how many professors, how many professors with advanced degrees, how many students per professor, how many books and subscriptions in the library, how many computers and labs, what are the student-to-faculty ratios. But as systems begin to mature, the discussion inevitably comes to terms with the fact that these data do not necessarily measure quality. And then it's back to "What is quality in higher education?" and "What *should* we measure?"

Countries with more experience are moving to new ways of viewing and measuring quality. Chile has moved towards more flexible standards to respect the diversity of institutional missions. Brazil is

experimenting with new tests to attempt to measure the impact of higher education and how much students learn. It is expected that in trying to measure something as elusive as higher education, systems can only build on their own experience with the objective of constantly improving; models and formulae developed elsewhere will just not be useful.

PARADIGMS AND PURPOSE

The responsibility for quality assurance has almost always been handed to new agencies. The status of these agencies is often ambiguous. They are established as independent entities, yet depend on the Ministry of Education for funding and are typically managed by representatives of different constituencies with considerable self-interest to protect (including individuals from the national associations of university rectors, members of other education associations, members of Congress,

etc). As a result of the way the governing board or commission is constituted, these agencies have been seen as more susceptible to political influence than elsewhere.

An unusual practice in Latin America is the participation of private entities that carry out the external evaluations. This model operates in Chile, Mexico, and (soon) Peru. These private agencies must be certified and monitored by the national accrediting body, adding another level in an already complicated process. Otherwise, they are independent and self-funded. As a result they charge high fees to institutions to conduct evaluations in order to pay evaluators and, one assumes, earn a profit for the agency.

In most cases, the model for evaluation follows a now international paradigm of self-evaluation, a report to the accreditation agency, a visit by external peer evaluators, a second report to the agency,

and a decision with implications for the status of the institution or program.

The accreditation systems of each nation vary in their focus and objectives. The evaluations may focus on graduate degrees, undergraduate degrees, only degree programs with social impact, the functioning of institutions or any combination of these.

Participation in the accreditation process may be voluntary, but there are often mechanisms in place, such as preferential access to student credit or public funds, that make the process effectively mandatory. In Argentina, for example, an unaccredited degree in medicine will not qualify for "national recognition," causing endless problems for the graduate. In Colombia, accreditation adds prestige to universities that have achieved it and will allow these institutions to bypass several requisites for government authorization to start new programs.

Often the final purpose of accreditation is not clear. Although the main goal is quality, as emphasized here, this remains a rather abstract concept. Should accreditation verify that minimum standards have been met? Is the objective to assure potential employers that students have the requisite professional preparation? Is it only to facilitate mobility across institutions and national boundaries as an assurance that international standards have been upheld? Is it an exercise whereby government certifies for the society at large that the education provided is "good enough"? Is it meant to achieve greater operational efficiencies? In theory, the answer is all of the above . . . but in practice, often none of them.

CONCLUSION

The quality of higher education is reflected in the thousands of events that take place at every university every day—evident in the dynamic in the classroom, the processing of student records, the maintenance of laboratories, the review and updating of academic programs, the hiring of professors, the maintenance of safe infrastructure and many, many more small actions. No external agency can

provide oversight over all of these daily events. Ultimately institutions have to assume responsibility for maintaining and improving their own quality.

Quality cannot be enforced by external entities; it evolves from an internal commitment. In the worst case, external agencies create inspections systems that become checklists for universities to confront on three- or six- or ten-year cycles—the evaluation becomes an end in itself. In the best case, national systems for quality assurance create mechanisms and guidance to insure that individual institutions develop processes to monitor and improve their own quality. In the end it is the difference between bureaucratic process and a quality culture.

Latin American higher education systems and their young accreditation agencies have many challenges to overcome; there is a growing demand for quality as well as reliable and convincing evidence that institutions are assuming responsibility for their output and results. For these national agencies there still remains a fine line between useful orchestration and interference.

But the growing demand for greater accountability is valid. A great deal of social and economic development depends on the quality of higher education. Higher education absorbs a considerable investment of public and private funding and must return both public and private benefits.

Traditions and prejudice at many Latin American universities have made necessary reform difficult. The quality assurance agencies may well be able to bring about some of these changes by facilitating self-reflection and connecting national needs and priorities to international practice and trends. Whether these new agencies will become new bureaucracies or catalysts for change remains to be seen.

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Building Knowledge Economies in Central America

The Role of Universities

BY JORGE HUETE-PÉREZ, PETER SOMMER AND FERNANDO QUEZADA

UNIVERSITIES HAVE BECOME ESSENTIAL TO HOW countries develop economically. They promote information and communication technologies (ICT), health sciences and medical instrumentation, new crop seeds and modern agriculture and sciences in general. In short, they are innovators, using their production and management of knowledge to produce what is known as a “knowledge economy.” This is particularly important in countries such as those of Central America, which have lagged behind.

University projects are playing active roles in the region’s knowledge economy takeoff. In El Salvador, the Universidad Don Bosco has an important initiative in the area of aircraft maintenance which involves multiple technology platforms. In Nicaragua, the Universidad Centroamericana has established the first Center for Molecular Biology in the country. The incubator Campus TEC in Guatemala is heading important initiatives in the area of information and communications technology (ICT) with new applications software and other innovations. The National University in Honduras (UNAH) is supporting its university microbiology laboratories in leading-edge studies on HIV and Dengue Fever.

Governments throughout Central America—as elsewhere throughout the world—are developing public policies to promote economic diversification and sustainable jobs through science and technology parks, innovation districts and “cluster” development. While the knowledge economy itself isn’t as large as the “traditional” economy, investors and

government officials alike realize its growing importance and global dynamism. The question internationally is how to stimulate elements of the knowledge economy relating to fields such as biotechnology and renewable energy. Priorities include capacity-building in human resources, research infrastructure, legal framework for the protection of intellectual property and promotion of an innovation culture and climate. A key pillar of this new economic configuration is represented by the use and adaptation of ICT to facilitate the effective creation, dissemination, and processing of information. Although the international dialogue incorporates many associated terms and aspects such as “information society,” “new economy,” “digital economy,” “knowledge networks,” and “knowledge cities,” the themes of information revolution and innovation are paramount in all of the knowledge economy efforts. All of these concepts are associated with universities and their role in economic development.

CENTRAL AMERICA IN TRANSITION

While the least economically advanced countries of Central America, such as Honduras, Nicaragua, El Salvador and Guatemala remain noticeably behind in the development of knowledge-based sectors, efforts are underway to explore the various avenues and opportunities open to this region in the years to come. In addition to government programs and private industry initiatives, universities in the region have a major role to play in generating and sustaining the needed human



Left: Nobel Laureate Richard J. Roberts of New England Biolabs at the opening ceremony at VI Nicaraguan Biotechnology Conference (April 12-14) Genomic Archiving and Coastal Marine Biodiversity Exploration, Conservation and Sustainable Development. Right: conference participants during the first day of the conference.

capital and technology transfer pipeline. To be sure, intermediate and consumer products associated with the global knowledge economy are already part of governmental, business and civilian life there. Imported products of knowledge-based sectors in information and communications technology as well as in health sciences, agriculture, environmental engineering and others are all having an impact on how business is done in Central America. However, leading intellectuals and policy-makers in each of the Central American countries are called upon to establish programs and policies to help develop local capacity in creating and managing knowledge-based resources. Each country in the region has distinct public and private sector approaches to innovation. Each of these countries also exhibits a sizeable gap with the industrialized world in terms of standard of living as well as a widening disparity in local distribution of wealth. Unless regions like Central America can find ways to participate on the appropriate knowledge utilization, as well as on the production side of knowledge creation, the gap will only grow larger.

PARADIGM SHIFT

The countries of Central America need to become less dependent on bulk exports of agricultural goods and minerals and other commodities. These countries do have manufacturing advantages based on low-

cost labor and comparative wage differential, but they will be difficult to maintain against Asian competitors without introducing greater diversification and knowledge-based technological upgrading. Even China has realized that if it is going to sustain growth, it cannot always rely on cheap labor. Because knowledge-based companies are now more inclined to locate where the qualified and talented workers can be found, human capital development will need to be a high priority for all Central American countries, but especially El Salvador, Guatemala, Honduras and Nicaragua.

Other Central American countries in the region like Costa Rica and Panama are already moving forward to bridge gaps in human resource availability including outreach to their respective diasporas in the United States, Europe and other places. As part of its development agenda, Belize has launched a specific initiative to reengage with its diaspora. Scientists and engineers expatriates are valued not only for their contribution to the country's economy in the form of remittances, but as an untapped stockpile of technology and expertise. Neighboring Honduras has created a public-private diaspora knowledge network for development called "Honduras Global." In all of the countries, efforts to increase the educated workforce in these countries must be complemented with measures to

absorb the knowledge workers. To thrive in the knowledge economy the least developed Central American countries will need to build on their strengths and to identify the sectors and areas best suited for supporting knowledge-based economic activities. Based on current reported trends, these include information and communications technologies (including applications for small- and medium-sized businesses), logistics management, health percent life science, creative industries, biotechnology and sustainable agriculture. Strategies for transition must be developed, and needs support and synergy among the several countries.

ROLE OF UNIVERSITIES

More and more, universities are seen as the generators behind efforts to build local and regional knowledge-based economic activities. In addition to their very central role in the education and training of qualified human resources, universities are at the center of technology commercialization efforts through newly established university technology transfer offices and expanding activity in university patenting. In developing countries, universities take on a more urgent role because of a relative lack of private sector initiatives in knowledge-based enterprises. In Brazil, for example, public and private universities are taking the lead in framing knowledge as a

commodity which can be deliberately generated, stored, bought, sold and traded. Furthermore, universities provide the landmark for a changing paradigm that eliminates the strict division between mental and manual activities. Productive processes will continue to depend on university-based intellectual input and capacity-building in advanced skills. However, even the greatest universities with the utmost responsibility towards creativity and innovation cannot build the knowledge economy on their own. In their leadership roles, however, as they bring about the development of a culture of learning and commitment to innovation and entrepreneurship, universities can make substantial contributions to local and regional economies.

While universities in Central America are striving to provide top education and training programs to a growing population of young professionals, there continues to be a lack of corresponding employment opportunities, quality standards, international linkages and R&D infrastructure commensurate with the technological and scientific knowledge and skills attained abroad. Similarly, the flow of Central American students going abroad for advanced training in science and technology is not always matched with a return flow of these highly qualified human resources to the region because of a lack of employment opportunities. It is perhaps this lack of employment in knowledge-based industries in these Central American countries that explains the reported decrease in demand for science degrees in

the region. The online journal SciDev. Net reports that just three percent of secondary students in Latin America express their interest in pursuing a career in science. This statistic may not necessarily or entirely reflect the situation in Central America, but it does point to the need to maintain the interest of the student population in the emerging fields of science and technology and the sorts of careers available to them in the short and medium-term future. Universities in El Salvador, Guatemala, Honduras and Nicaragua also have much work ahead in improving their standing in international rankings. The table below indicates selected rankings for 2011 and 2012.

While universities in Central America are poised to play a leading role in building the Knowledge Economy, they also can help solve a number of difficult obstacles, considering the frequently difficult circumstances regarding both human resources and financial allocations. The question that arises is whether they are able to compete with the best universities in the world and ensure a sustainable level of excellence while becoming more effective in responding to societal and economic needs.

REGIONAL STUDY

In their attempt to position themselves effectively in the global economy, Central American countries have benefited from the cooperation of international development agencies. The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH (German Agency for International Cooperation)

implements various programs in Central America on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) to work in collaboration with government institutions, universities, private sector organizations and community groups on issues such as sustainable economic development, renewable energies and prevention of youth violence. In 2011, GIZ launched a regional project called "Knowledge Economy in Central America," which seeks to stimulate discussion on the conditions and actions required to enable a successful transition toward national and regional economies based on knowledge. The study project, which focuses on El Salvador, Guatemala Honduras and Nicaragua, is designed to create a greater awareness on the part of the public, private and academic sector about opportunities in knowledge-based economic activities as well as to present existing example cases and practical recommendations to key decision makers on this topic. Universities and university-related institutions in the above mentioned countries are playing an important part in this study.

As knowledge becomes a key element of the Central American countries' economies, universities have real opportunities to play a leading role in the local innovation systems. Yet universities also face critical challenges in seeking to rise to the changing economic and social environment. These difficulties should be borne in mind when considering policy frameworks that might be developed to foster knowledge-based economic development. The GIZ study will lay out a number of projects and strategies that are actively contributing to regional economic development. The success of such examples make a case in favor of an even more significant university role in building knowledge economies in Central America.

The authors of the present article serve as coordinators of the GIZ study project that also involves country experts in each of the four countries mentioned.

Jorge A. Huete-Pérez is Director of the

IBEROAMERICAN RANKING SIR 2012			
Country	Top-ranked university	Rank 2011	Rank 2012
El Salvador	UES	468	527
Guatemala	USAC	305	324
Honduras	UNAH	393	324
Nicaragua	UNAN León	327	343



Taking on the Challenges

Higher Education in Colombia **BY MOISÉS WASSERMAN**

HIGHER EDUCATION IS A HOT TOPIC IN Colombia. In 2011, students went on strike and into the streets to protest a proposed reform to the 20-year-old higher education law known as Law 30, saying that the changes would lead to the privatization of education. Thirty-two presidents of public universities—including myself—openly declared our opposition to the philosophy behind the proposed reforms. The issue of higher education swept through the media, chat rooms, classrooms and cocktail parties.

The debate was often quite specific: the bill to reform the law had 165 articles, but I will refer to just a few of them. The fundamental question at stake was this: is university education an inalienable right or a commercial good? I (and many others) believe that equal access to education for Colombians, no matter what their background, is a right and a long-term national investment in the country's future.

Eventually, President Juan Manuel Santos withdrew the bill and called for a national dialogue about higher education that would result in a new proposal. Universities, academic institutions and associations of university professors and students have gone to work, beginning a process of reflection to generate a new bill in a year or two.

Both the government-sponsored bill and the objections against it present an excellent opportunity to understand the problems of Colombian higher education and the solutions proposed by diverse groups within the society. The Colombian case can also shed light on the situation of higher education in Latin America and the Caribbean in general. The details may differ; this discussion will illustrate the predominant positions of governments, some multilateral organization, the academia and student opposition groups.

During the two years leading up to

the proposed reform, there had been much controversy about the financing of public universities and access to subsidized loans for low-income students who wished to study in private institutions. All throughout 2010, attempts had been made to change the sections pertaining to financing in the General Law for Higher Education. But Congress did not approve the changes, possibly because they were presented in the last six months of a government that had lasted eight years. The new government of Juan Manuel Santos committed itself from the start to elaborate a bill that would greatly modify Law 30, which had become obsolete and inadequate for resolving today's problems of higher education.

One of the most contentious aspects of the proposed reform was the introduction of for-profit universities to Colombia. Up until now, despite a very dynamic higher education system, there's never been a



Photo caption: *Dustinci as vendae verum consequaspel int que volectus et est magni Me optat molestem idus accat ellendis alibus*

ity principally cost the state and the families who wish to educate their children.

Moreover, many non-profit private universities declared that they felt threatened by the competition from the proposed introduction of these low-cost institutions, which can contract professors on an hourly basis without benefits, while the established private institutions must maintain high-quality faculty and expensive technological structures, especially if they wish to receive accreditation for their programs and carry out scientific research. The example of Brazil was unconvincing, because although Brazil does indeed permit for-profit universities, the country's emblematic public universities are aggressively financed and they are the ones, not the recent arrivals, that sustain the quality of higher education. In the United States, such for-profit universities have been criticized as mediocre half-way solutions to the challenge of higher education, with a very high dropout rate, often generating unfulfilled expectations for employment; moreover, these universities have created a problem for the federal student loan system because of delayed payments and bankruptcies.

In the recent U.S. presidential campaign, people voiced concern that the principle of equality of opportunities was threatened by this type of institution, because it provides a poor education to poor people without giving them a competitive edge in the labor market. The proposal to allow for-profit universities was withdrawn by the president during the discussion of the bill, before the bill itself was withdrawn. But it is an important point to bring up here since it reveals a certain attitude favoring privatization.

A second large theme in the proposal was the financing of public universities. The central problem was easy to see: Law 30 has kept public university budgets frozen for more than 15 years. Back then, legislators, surely with good intentions, had decreed that the budget of public

universities should be adjusted annually according the cost-of-living index (IPC). At the time, this was seen as a victory for the universities, but after a while it was revealed as a Pyrrhic victory. The university system practically doubled in the number of undergraduate students and multiplied several times over the number of graduate students. Universities developed new technological needs such as information and computing systems, instruments for online and distance education. They also needed new classrooms and laboratories, as well as maintenance and renovation of existing infrastructure because of natural wear-and-tear. All these expenditures, well above the increase in the cost-of-living index, were not anticipated, and the universities had to partially cover the costs through tuition fees, as well as by providing paid consulting services (research is conducted through externally financed projects). However, in Colombia, not much income is generated through charging overhead on such projects. Moreover, new laws, not covered under the rising IPC, created additional costs. The cost of social security rose; a series of productivity stimuli generated an increase in professorial salaries; buildings had to be brought up to new earthquake-resistant standards and be made handicapped-accessible.

The situation at the present moment is that the state contribution to the public university is barely enough to pay salaries; in some universities, it's not even enough for that. The rest of the money has to be raised. This effort has reached its limits without having to raise tuition, a measure that would be catastrophic in the Colombian system because it would exclude the poor.

The government proposed two basic ways (simplifying) to resolve this problem. The first was a gradual increase in the budget, 1 percent above the IPC the first year, 2 percent the second year, and 5 percent for the five following years. But this increase would be subject to commitments to an increase in student slots and in quality—commitments that would carry a much greater cost than the

for-profit university. In a public act, the Colombian president put special emphasis on for-profit universities as a new contribution by the corporate sector to the solution of the problems of insufficient student slots and inadequate funding. Speaking in different venues throughout the country, Santos cited international examples to support his position in favor of for-profit universities advocated by the Education Ministry; the most important was Brazil, where this type of university was introduced during the past government of President Lula da Silva.

One important objection to Santos' proposal pointed out that if business people supported these for-profit universities, they would expect a return for their investment. Their profit would necessarily come from student tuition, much of which will be paid with subsidies from the state. Thus, the for-profit institution, allegedly funded by business, would in real-



**Photo caption: Dustinci as vendae verum
consequaspel int que volectus et est magni
Me optat molestem idus accat ellendis alibus**

percentage offered. The second proposal (basically directed at private universities) was an increase in contributions to tuition loan funds and a decrease in interest rates (the system was on the verge of collapse because debtors were unable to pay). The proposal also included the creation of a fund offering a small subsidy (barely enough for the cost of transportation) for the poorest students. The Colombian loan system at the present time only covers tuition; moreover, loans—even those with a low-interest rate—are difficult to pay, especially given the starting salaries for young professionals (Observatorio Laboral Ministerio de Educación Nacional <http://www.graduadoscolombia.edu.co/html/1732/channel.html>).

The main objection to these proposals lay in the discrepancy between the government's stated goals for improvement in coverage and quality and the resources that it was offering (see my own October 31, 2010, editorial in *El Tiempo*, as well as the Universidad de los Andes Center for the Study of Economic Development 2011 report, "La educación superior de calidad cuesta. Modelo prospectivo de análisis de inversiones, costos y financiación de la

oferta para una educación superior con estándares de calidad, cobertura y pertinencia en Colombia a 2020.")

The current average annual state subsidy to the public universities per student is about US\$2,000; the reform bill's financial proposal combined with plans for growth would progressively decrease this amount. Private tuition costs are considerably higher (US\$6,000 to \$18,000 yearly), a fact that leads low-income youth to seek the lowest loan possible to study at low-cost programs and universities (programs of chalk and chalkboard, institutions without accreditation, without laboratories, without fulltime professors). At the same time, the loan system hardly covers 20 percent of the students, and the proposal could not increase this figure to much more than 25 percent. Some elements of the government proposal changed slightly during the discussion. It was proposed that the increase in funding for public institutions not be gradual, but rather 3 percent from the very first year, and that half of this increase not be subject to new requirements.

The third great block of reforms, which generated great discussion, was related to autonomy and university governance. In this area, the bill did not propose great changes. Initially it limited the activities of the ruling university bodies

(*cuerpos colegiados altos*), introduced minor changes in the makeup of the higher education councils and tacitly diminished the decision-making powers of the Academic Boards. But these limitations were soon withdrawn. Nevertheless, this was a much discussed topic because the student movement demanded changes in university governance: namely, much greater representation in the participating bodies of students and professors and direct election of president and deans. This will be one of the points of discussion in the future because many professors disagree with the position of the students. The experience of this apparent democracy of simple majorities without taking into account academic merit has had very unfortunate outcomes in other countries in the region.

University autonomy is a principle established by the Constitution in Colombia but never incorporated in a body of law. The Colombian Association of Universities prepared a bill for a Law on Autonomy, which brought together all the legal jurisprudence for the past 20 years, to be discussed along with the proposals for the Law on Higher Education.

In Colombia, as in many of the countries in the region, only 30 percent of college-age youth actually have access to higher education, and even then, the

quality of education is not very good. There is a balanced system of both private and public universities with a very uneven quality in the two groups. Tuition costs in the public sector are practically symbolic; in the private sector, tuition is directly related to quality: very high for good universities and for complex programs, sometimes in those very fields with the most impact on development such as science, engineering and health.

In the opinion of representatives of the highest levels of the Education Ministry, higher education is not a fundamental right (as are basic and high school education), but rather a privilege, and one has to pay for privileges. In a chronic situation of scarce public resources, the government limits its contributions and transfers responsibility to the families through loans. Clearly, public higher education is insufficiently financed yet demands a much higher performance in cost per student than does the high-quality private university. Such demand inevitably leads to a deterioration in the quality of public education, as happened in Colombia to primary and high school education in the past fifty years. If the present policy for higher education persists, public universities will lose their capacity to compete with the private universities for good professors, as well as the possibility of keeping up infrastructure.

The problem can be summed up in a simple form: higher education in many examples in history has been either an instrument for social mobility and the promotion of equality of opportunities, or a generational transfer of privileges for the purchase of high-quality education and thus of leadership positions in the marketplace and government. The higher education policy that Colombia adopts can swing the balance in either direction.

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Combating Inequity through Higher Education

Private-Public Alliances BY CARLOS ANGULO-GALVIS

PUBLIC AND PRIVATE SECTORS MUST FORM alliances in order to offer quality education for the majority of the population.

Throughout the Americas, students have been protesting, particularly around the issue of burdensome student loans. In Canada, the United States, Colombia and Chile, students have demanded a substantial improvement of education and its financing and, in Chile, they have also demanded that higher education be free. Unfortunately, given the economic situation of Latin American countries, free education is unviable; among other things, it would benefit high-income students who can afford to cover their own educational costs. Obviously, what is needed are innovative solutions that have frequently been used in other regions of the world to offer students loans, payable at the end of their studies with reasonable conditions.

Thus, as in other aspects of higher education, there is a need for a strong public-private-academic alliance. Funding is required for scholarships and loans with innovative solutions, which have already been applied—albeit in a limited fashion—in some Latin American countries. The most convenient scheme would let a student cover his or her educational costs (depending on his or her economic situation) by one of three means or a combination of these: a scholarship; a subsidized loan that is forgivable on the basis of the student's academic performance and the successful completion of his or her studies in the time limits set by the program; and a long-term subsidized loan that can be paid off once the student ends his or her studies and begins working. The last one would enable the student to return part of the cost of his or her training to society and, in turn, help other students

to finance their studies. The public sector should increase current resources and the private sector could invest in training high-level human capital. The loan total and the conditions of the forgivable loan must be carefully designed so that the repayments can be made according to the expected future earnings of the young professionals.

Quality education, as offered by many public and private universities all over the world, requires ever increasing financial resources. Public institutions in Colombia are highly dependent on government funding; private institutions have to generate all of their revenue and depend largely on undergraduate tuition fees. Thus, the challenge for aspiring research universities, in terms of financial resources, is immense.

Public universities charge very small fees and in some cases, subsidize, unnecessarily, students from middle- and high-income backgrounds. This policy should be reviewed to see if to obtain additional revenue could be obtained. Government financial resources are mainly distributed to universities on the basis of their student population, regardless of university quality and administrative efficiency. Measurements such as the success coefficient in the completion of undergraduate studies; study duration and administrative efficiency goals should become an essential part of the equation in the determination of how financial resources are distributed.

Private universities should continue to be responsible for their revenue generation. To promote quality, government funds for scholarships and subsidized loans should prioritize students from low-income economic backgrounds who obtain the top results in the secondary school evaluation tests.

The end result is that funding is of the utmost importance for higher education. Hence the need for public-private sector alliances to generate resources to improve higher education. Some examples illustrate their importance. The most relevant are found in Brazil and are the long term alliances that resulted in Embraer, aeronautical engineering and Embrapa, agricultural development. Colombian Colfuturo, begun in 1992 as a public-private alliance, has evolved into a private endeavor and has provided funding for some 5,700 students to undertake graduate training in top world universities. At a smaller scale, but very innovative, was the Harvard-Universidad de los Andes endowment fund, started some 30 years ago, which has contributed to the strengthening of Universidad de los Andes faculty. The need for qualified personnel in Earth Sciences generated a very effective public-private alliance; mining and oil industries are contributing substantial resources for Chairs and scholarships for the new Universidad de los Andes Geoscience program. Colombian Colciencias has promoted academic research in collaboration with industry and some important results have already been obtained; continuity and additional resources are required to ensure the success of the project.

Colombia is not noted for its philanthropic activity. However, in the last few years important resources have been contributed by the private sector to "Quiero Estudiar," a program started at Universidad de los Andes in 2006, that has allowed some 800 very well qualified students, of limited financial resources, to attend the university.

Sources of funding are essential in Latin America where Gini coefficients—a standard measure of inequality—are higher than 0.5 in all countries in the region. Thus, inequity is one of the most important problems affecting Latin America, Colombia in particular. Governments have tried to reduce this inequity, but innovative approaches are needed.

The links between Latin American universities and the production sector are as yet weak, and their strengthen-



Photo caption: *Dustinci as vendae verum consequaspel int que volectus et est magni conse-
ceaque perum aut optat eius et iniae. Lorit la nosant quibus nobisquiamus essus*

ing is essential to technological development. The promotion of entrepreneurship in undergraduate and postgraduate programs also merits consideration.

TODAY'S SITUATION

Education in Latin America is extremely heterogeneous and enrollment rates fluctuate: in primary school, between 40 percent and 100 percent; in secondary school, between 70 percent and 95 percent; and in post-secondary education, between 18 percent and 70 percent. To add to the problem of low enrollment, quality is not very uniform, and often extremely deficient. For the most part, Latin American countries do not participate in Program for International Student Assessment (PISA) testing, assessments that focuses on 15-year-olds' capabilities in reading and mathematics literacy. When Latin American students do take the test, their performance compares unfavorably to their counterparts in countries in other regions of the world. Given that the quality of a person's basic education sets the standards for his or

her future, those who receive deficient education in the initial phases experience great difficulty in correcting their shortcomings later on, and may incur considerable costs. In higher education, there is a noticeable lack of technicians and technologists and, in some cases, an excess of professionals who lack adequate training and therefore have difficulties in finding adequate employment. Quality education, although costly, is an investment for the future. It provides added value in all its phases; unfortunately, government resources are limited and students have to cover at least part of the costs for their studies.

Quality higher education is an essential ingredient for the development of a country and it is easy to find a correlation between education and development. The competitiveness index for Latin American countries is low; thus, the importance of improving education in Latin America is enormous, with both additional enrollment and, more importantly, a substantial improvement in terms of quality.



Quality, as we well know, is necessarily linked to the quality of the teachers, who all too often have deficient academic training and lack pedagogical skills. Universities depend too much on part-time professors, who normally teach in a number of institutions at the same time with irregular results. This combination of factors has led to the proliferation of the so-called “garage universities,” which have a very basic infrastructure and limited academic resources and which, more often than not, are profit-making organizations that offer very low-quality education. These institutions invest substantial amounts of money in marketing to attract students; their graduates, however, end up inadequately paid and in jobs for which a university degree is not necessary. Low-income students, who

have been through a deficient basic and secondary education, are the ones who usually attend these institutions, further hindering their chances of climbing the social ladder. It is a perverse system that ought to be controlled.

The development of solid technical and technological institutions that offer quality training pertinent to the requirements of the country is a desirable alternative. What is the best option for a country, a frustrated university graduate who cannot find the right job, or a highly trained technician or technologist who is useful to society? A barrier that needs to be gradually broken down is Latin American society’s lack of social recognition for technicians and technologists, rendering these professions less than attractive. Every country needs a reason-

able ratio—currently only to be found in developed countries—of technicians and technologists, and university graduates.

Unlike in developed countries, in Latin America it is common for an institution to “migrate” to another level without being prepared for it. Thus, a competent technical institution, can turn into a technological institution and later into an undergraduate university, and on to a postgraduate university, and subsequently a research university. This process usually leads to a level of incompetence known as the Peter Principle.

In 2007, the Interuniversity Development Center (CINDA) conducted a study on higher education in Ibero-America. In 2011, it prepared an updated study that allowed monitoring through a four-year period. The study indicated that

some progress had been made, but that a daunting task lies ahead. These studies show that the total expenditure in education in 2008 varied between 0.2 percent and 1.7 percent of the GDP with a significant input from the private sector in some countries such as Colombia. In developed countries such as Canada and Korea, this expenditure is just over 2.5 percent of the Gross Domestic Product (GDP), which means that Latin America needs to increase its education budget and improve its disbursement.

Private higher education enrollment in Latin American countries varies considerably. In 2010 it fluctuated between 27 percent in Argentina and 80 percent in Chile. In addition, the success percentage for completing undergraduate studies is very low, varying between 20 percent and 60 percent from country to country; in the case of technicians and technologists and in the so-called “garage universities,” it is even lower. An increase in the success coefficient, with more graduates attending the same facilities, would lead to a very efficient use of resources.

Some advances have been made over the last few years in ensuring the quality of Latin American higher education institutions. Accreditation entities have been created to undertake evaluations of both institutions and specific undergraduate and postgraduate programs. Coverage, in terms of accreditation, is still low and currently in Colombia—where this process began in 1998—it is of 6.7 percent of university institutions and 9.3 percent of accredited programs. Strengthening and expanding accreditation is of fundamental importance to force the institutions to really improve their programs and duly inform the student community of the developments in the system.

THOUGHTS FOR THE FUTURE

University rankings have become more relevant, and even though their results should be carefully analyzed, they provide an idea of the relative position of a university in the global context. The United Kingdom’s QS ranking includes only 2 Latin American universities

among the first 200 in the world and 16 among the first 500.

Evidently, Latin American countries must increase their efforts to improve enrollment levels in secondary and higher education. They urgently need to substantially improve the quality of education, which is currently heterogeneous and varies greatly within urban areas and in particular, between urban and rural areas.

The training of qualified teachers is fundamental for a quality education in Latin America. We must try to attract young people with a high level of academic training to the profession by offering them attractive working conditions, as has been done in Finland and Singapore. Some interesting initiatives have been created in this direction in Argentina, Chile, Colombia and Peru with programs that follow the *Teach for America* guidelines. If these initiatives are continued and consolidated, they could bring about extremely positive effects in the future.

Higher education institutions in Latin America must focus on activities that will lead to quality technical, technological and university institutions that offer programs pertinent to the country.

Higher education institutions in Latin America must focus on activities that will lead to quality technical, technological and university institutions that offer programs pertinent to the country. The Carnegie Classification of institutions of higher education, which adequately recognizes the diversity of institutions, constitutes a good guide. As well as technical and technological institutions, countries should also have community colleges, undergraduate universities, universities for postgraduate studies, and some research universities that are essential to a country’s progress.

Additionally, given the region’s characteristics, it would be important to

motivate students to enroll in agricultural programs since few graduate in these areas and the opportunities afforded by the large undeveloped areas are enormous.

The heterogeneity of education in different countries needs to be controlled and monitored by governments, institutions and their personnel. Strict standards must be imposed to keep students, generally low-income ones, from feeling frustrated because they are not able to obtain the education they want.

Programs need to be implemented that will help reduce attrition rates in higher education, in order to increase coverage, without additional costs. The articulation of secondary and higher education, personal and academic counseling and financial support can be combined to achieve this purpose.

Undergraduate programs need to be redesigned in order to adapt them to the dynamic development of knowledge and the excellent prospect of making education a life-long process. Programs similar

to those at the best U.S. universities, with strong humanistic training and high levels of interdisciplinary, electivity and flexibility are the most adequate for training professionals who can be adaptable to a dynamic globalized environment.

In the best higher education institutions, an important generational phenomenon is taking place whereby young well-qualified, pedagogically trained academic professionals, will be the professors of the upcoming generations. Working conditions are becoming more and more favorable and a number of institutions have a critical mass of qualified academics that serves to attract very well qualified professionals.

Universities must continue to strengthen the processes of internationalization through student and teacher exchange programs, as part of agreements with prestigious international universities. The programs offered by universities with high academic recognition must be welcomed in Latin American countries, but not those offered by universities with a low-level of recognition that do not have sufficient demand in their home countries and thus try to take advantage of their installed capacity by recruiting foreign students.

The challenges for universities that aspire to become research universities are daunting, given the resources required for professors' training, for providing adequate research infrastructure, and for the acquisition and up-dating of information and communication technologies along with library resources. Yet it is the only route to adequately train academics to develop quality research projects and, in some fields, generate new technologies. Low levels of investment in research in all countries constitute an important limitation.

Instead of the improvisation and changes of policy frequently observed in some countries, state policy designed for the long term is of the utmost importance to obtain quality education.

In sum, higher education institutions, especially universities, face a transcendental challenge over the next few years: that of efficiently contributing to the leap which Latin American countries must take in order to join the developed world. The alliance between the public-private-academic sectors can contribute greatly to achieving these results.

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Capitalism in the Classrooms?

Beyond “Garage Universities”

BY CLAUDIO DE MOURA CASTRO, ALDO GIUNTINI AND LUCIANA LIMA

ALL OVER LATIN AMERICA, FOR-PROFIT PRIVATE universities are flourishing. They range from excellent elite institutions in wealthy neighborhoods to so-called “garage universities” of uneven equality that teach varied trades and professions. However, Brazil’s strenuous exit test on completing university provides a critical weapon to prevent fly-by-night for-profit universities. Institutions that fall below a certain level get great public exposure in the press and stiff penalties from the Ministry of Education. Brazil is an example of a country that has shown that it is quality that counts in higher education, not whether universities are for profit or not.

Saint Thomas Aquinas expressed the view that those who make profits are as evil as assassins. Although successful countries today have embraced the market economy, capitalism is still rejected as sinful and perverse in the area of education, even in the most market-oriented nations.

Here, we explore the theme of profits in higher education from an empirical perspective. Concretely, what do the numbers tell about profits and the resulting quality of the education offered?

Photo caption: *Dustinci as vendae verum consequaspel int que volectus et est magni Hendunt, omnis dolo illa arunt, non re ni*



Photo caption: *Dustinci as vendae verum consequaspel int que volectus et est magni*

If for-profit institutions cannot provide quality education, we need to worry, considering their growth in the recent past. If it turns out that profits do not harm quality, what can be wrong with them?

Brazil was chosen as a case study because reliable and universal measures of school achievement exist for graduates of four-year colleges. No other country has such indicators.

THE UNIQUE CASE OF BRAZIL

Probably, no other country can provide a better testing ground for such queries than Brazil. The number of institutions is large and varied. In addition, tests allow for convenient comparisons because of universal examinations at the end of the four-year university cycle. In the mid-'90s, the Ministry of Education created what was then called the "provão", a test applied to graduating students, covering the core subjects in each career. Thus, as Brazil expands its education system, measurements are readily available—a unique case in Latin America and indeed the entire world.

In the last half-century, after a long period of backwardness in all levels of

instruction, enrollment in higher education expanded at a brisk pace. In 1945, enrollment in higher education was 43,000 students. By 2010, Brazil boasted an enrollment of 6,552,000 students.

In the early 1960s, the federal government worked energetically to expand its network of universities. The option for expensive institutions, research emphasis (at least in intention) and lavish campuses was clear enough. But operating with costs per student similar to those established by the Organisation for Economic Co-operation and Development (OECD) averages, the federal government soon ran out of resources to keep expanding such an extravagant system—particularly considering the poor quality of basic education.

Since the 1990s, the political pressures for more vacancies in higher education could not be met by the public system. This led to more liberal policies towards the private sector.

In 1995, a change in legislation allowed higher education institutions to declare a profit motive—something that was already legal in primary and secondary education.

In 2010, statistics show that 12 percent of the students are in public institutions and 88 percent in private, with 37 percent of private institutions declaring a profit motive. And this proportion is progressively increasing. The numbers are quite large, with more than 3,000 institutions.

Despite some imperfections and unresolved technical issues in the tests, they provide a way to determine how effective higher education is. The tests are professionally prepared and, certainly, far better than what teachers use to grade students and determine whether they reach the levels required for graduation. The Ministry of Education data compares institutions using a composite index that includes test results, percentage of faculty with Ph.Ds and those working full time, as well as several other indicators of institutional processes. We object to the idea of mixing process variables with a measure of what students learned. Therefore, for the purpose of measuring quality, we used only the tests—from an analytical point of view, the other variables are extraneous.

It is worth mentioning another recent development, even less typical for universities and colleges. The vigorous growth in enrollment started to attract the attention of the financial world ever since the late 1990s. In fact, being a seller's market, the economic margins were huge.

Beginning in the year 2003, some of the bigger schools partnered with banks to open their capital (in technical jargon, to have Initial Public Offerings, or IPOs). As of this day, four have offered IPOs. Since they have been aggressively buying small and large institutions, in order to grow fast, the figures for colleges belonging to institutions with IPOs has now reached 23. If the devil of capitalism flirts with for-profit colleges, what can we say of large institutions, partnering with banks, to put their equity in the stock market?

In addition, U.S. for-profit institutions, including Laureate, Apollo and

DeVry, have partnered with local colleges in Brazil. In other words, there is an ample supply of for-profit colleges and an expanding number offering their capital at the stock exchange.

DOES THE PROFIT MOTIVE KILL EDUCATIONAL QUALITY?

To determine quality, we compared public universities to their private counterparts. We also categorized the private institutions as for-profit or not. A last subcategory includes the for-profit institutions that have had IPOs.

HOW WOULD THE TEST SCORES FOR EACH CATEGORY OF INSTITUTIONS COMPARE?

Public universities have high costs, offer the most favorable conditions to faculty and charge no tuition. Hence, they attract the best students.

Therefore, we assumed that public universities graduate students who tend to perform better in the tests.

Within the private sector, there are religiously-affiliated (Catholic and Protestant) institutions, community institutions, as well as others that do not declare a profit motive (called *Associações*). All these categories The latter group cannot legally distribute to the owners whatever surplus they generate, but must reinvest the money in education. How do these non-profit private institutions compare with those that declare profit motives?

It stands to reason that for-profits want to make profits, because the owners want to make money. In fact, the market system would collapse if it were otherwise. Not-for-profits may also have surplus, but must use it to grow or to improve quality, since the owners are not allowed to do otherwise. Such difference would suggest a superior quality for the latter category.

Most observers assume that between the for-profit and the not-for-profit institutions, there is a clear quality advantage in favor of those that are not for profit. This thesis, if confirmed, would vindicate the Thomas Aquinas thesis of the evil profits. However, the world is more complicated than that.

WHEN SCHOOLS MEET BANKS, THEY DON'T SPEAK THE SAME LANGUAGE

The first IPOs were made less than ten years ago and little attention has been devoted to study how do these alliances work.

Let us try to understand how banks and educators reach an agreement. As quarterly bank reports show, the analysts only look at profit rates and enrollment growth figures. This situation may lead school managers to promise extravagant short-run profits with accompanying growth in enrollments that is also blown out of proportion. As a result, they feel pushed to cut costs. The easiest way is to hire cheaper teachers. Quality would suffer, morale also.

Under those conditions, it makes sense to think that these institutions with IPOs are not in the market to offer high quality education. In so many words, they will be offering a commodity. As a consequence, they will have to compete in price.

And indeed, the real price of tuition in Brazil is seriously falling. For example, in the fiercely competitive area of Business Administration, mean monthly tuition has gone down from 532 Reais in 1999 to 367 Reais in 2009 (comparisons removing

inflation). What is even more surprising to foreigners, price wars have erupted in the large capitals.

Therefore, we postulated that the institutions that had IPOs would be found at the lower end of the quality distribution.

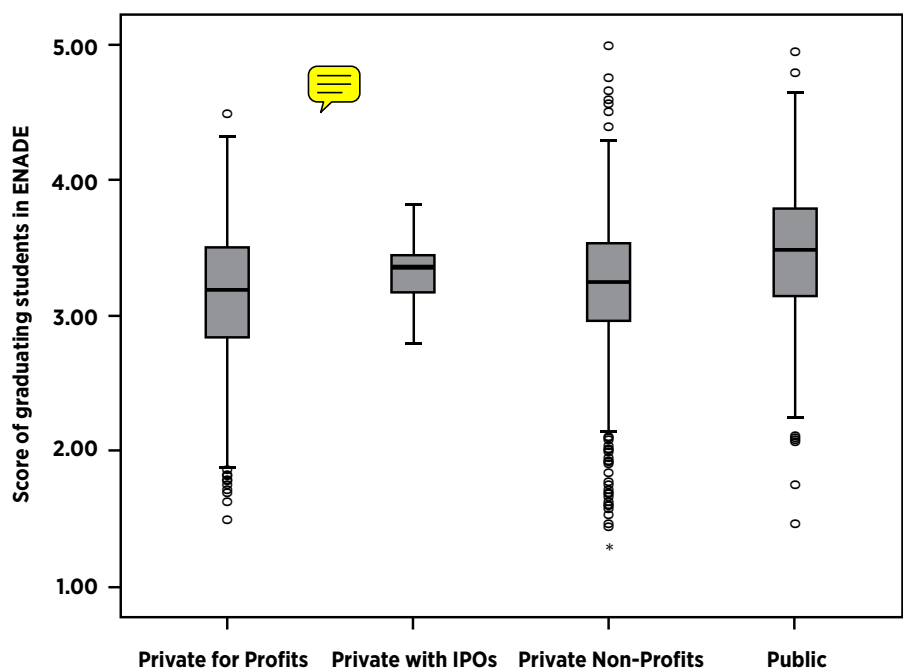
WHAT DO THE NUMBERS SAY?

The numbers confirm some assumptions but show some surprises. And let us not forget that these are very reliable numbers because of Brazil's robust measures of academic quality.

Well-informed observers proclaim the superiority of public over private institutions. The reality is not as simple. As the numbers show, the mean score of the public sector is somewhat higher. However, the overlap between the two curves is considerable. One simply cannot say that the public institutions are good and the private ones bad. The differences between means is quite modest, showing

Photo caption: Dustinci as vendae verum consequaspel int que volectus et est magni conseceaque perum aut optat eius et iniae. Lorit la nosant quibus nobisquiamus essusRo earum voles mincta voluptatur sectempo

ACHIEVEMENT LEVELS OF GRADUATES, CLASSIFIED BY LEGAL STATUS OF HIGHER EDUCATION INSTITUTIONS



that categories overlap, more than differ. The accompanying graph summarizes the numbers (The top and bottom line in each box represent, respectively, the means of the top and bottom quartile. The wider apart they are, the greater the variance).

Contrary to expectations, the public sector is far more heterogeneous than the private. Even more surprising, it can be just as weak. To sum up, there are more top quality institutions in the public sector but the bad ones are just as bad as the bad ones in the private sector. In other words, being public is no insurance against poor quality.

Even though the public institutions have somewhat higher mean, both the

preneurs want to make sure that, at least, they retain their market share. They may find it safer to reinvest to expand or to ensure a solid position in the market.

We can assume that some for-profits cut corners in quality more than others. But there are many not-for-profits that are quite amateurish and incompetent. Perhaps, those differences even out the results.

Looking now at those that have had IPOs, we also find that the performance of their students is not inferior. In fact, they show a slight superiority. Surprise! The proximity to bankers and their rates of return is not so deleterious to education, after all. These results put to rest the “holier -than-thou” attitudes of

academic results, compared to those of private institutions. However, there is great overlap, showing that the average institutions lie in a range of quality almost equally shared by both categories. This is an extraordinary result, considering that public universities are far more expensive to maintain.

2. Contrary to public belief, public institutions are far more heterogeneous than their private counterparts. There are more cases of outstanding performance, but there are also a several that are just as bad as the weakest from in the private sector.

3. Within the private sector, there are no differences between for-profits and not-for-profits.. Both groups are just about equal in quality of graduates. Saint Thomas Aquinas would not be happy, if he were confronted with data showing that the profit motive does not hurt quality.

4. We thought that institutions with IPOs would be placed below the average for the privates. This was a wrong assumption. The mean is the same as those of other private institutions.

5. IPOs display a very compact distribution, that is to say, a much smaller variance. They are never outstanding institutions. In contrast, they have less real flops among them, compared to all the other categories—including the public universities.

Perhaps the single most surprising aspect we found comes from comparing the three types of private institutions.

private for-profits and the not-for-profits also have some outstanding examples of quality education.

Perhaps the single most surprising aspect we found comes from comparing the three types of private institutions. As we can see, the scores are quite close. In fact, the differences are immaterial. For all practical purposes one can say that the profit motive does not hurt significantly the quality of education. Why would that be?

Let us consider that both categories of institutions have all the reasons in the world to make their revenues at least as large as their costs. If they fail to do so, they will go out of business (as has happened to many U.S. non-profit colleges, in the last several years). Whether they opt to be elite or mass institutions, the rationale is the same: generate more revenues and cut costs.

The only major difference is that owners of for-profit institutions can take home as much of the surplus as they please. However, when competition is stiff, as is presently the case, wise entre-

preneurs want to make sure that, at least, they retain their market share. They may find it safer to reinvest to expand or to ensure a solid position in the market.

However, the curves also show that IPOs are institutions of a different breed. They are insignificantly better in terms of their mean scores.. However, their variance is so much less. They do not inhabit the high end of the distribution. But even more striking, they are a much more homogenous group with no very weak institutions among them.

Within those institutions with IPOs, their weakest are less weak than some public universities. It appears that their internal rules were more effective in pruning bad apples than the other groups were. However, these internal rules also do not permit them to rise above levels that remains quite modest.

CONCLUSIONS

The data warrant some strong conclusions.

1. Comparing means, public institution graduates display slightly superior

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Aldo Giuntini, who holds a Ph.D. in Civil Engineering, is an associate professor at the Federal University of Minas Gerais.



AFFIRMATIVE ACTION

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- From War to Progress 67

Breaking A Vicious Cycle of Social Exclusion

University Education In Contemporary Brazil **BY NAOMAR ALMEIDA-FILHO**

IN 2002, I WAS AT HARVARD AS A PAN AMERICAN Health Organization Fellow in the Center for Health and Society, doing research with epidemiology professor Ichiro Kawachi on health inequalities. Back home, a group of colleagues nominated me as candidate for *Reitor* (head) of my university in Brazil and, although almost in absentia, we won the elections with a large majority of faculty votes (in Brazilian public universities, deans and presidents are elected with proportional voting of faculty, staff and students).

The Federal University of Bahia (UFBA) is located in Salvador, capital of the state of Bahia in the impoverished Northeast region. During colonial times, Salvador was the main port of entry for the slave trade from Africa. This deeply influenced Bahia's cultural and demographic profile, and a large majority of

ever been admitted to the university. The poor were in the minority overall and virtually absent from more prestigious courses such as medicine and law. UFBA was not alone in being so segregated because, then as now, higher education in Brazil has been a very scarce and valuable social asset. In the year 2000, less than 3 percent of the population studied at the university level.

Cited in the Brazilian Constitution as a citizen's right and a duty of the state, education is theoretically universal, but it is underfunded and has recognized deficiencies and imbalances. Indeed, the public school system contributes to the increasing social exclusion of the poor because of its low quality. Thus, in contemporary Brazil, a broader cycle of reproduction of social inequalities operates through education. Two vicious circles intertwine.

universities. Poor youngsters who have attended low quality, underfunded public schools and, against the odds, manage to complete secondary education, have less probability of passing the exam. The entrance exam, in this vicious circle, functions as an instrument for selective social exclusion. The middle and upper classes therefore occupy most of the places in the prestigious courses of study in the best public institutions. For the poor, there only remain places in low prestige programs in public universities or, more frequently, in low quality, private institutions. This closes the first circle.

A second vicious circle of social perversion reinforces this inequity. In Brazil, public education is totally free, even for the rich who could afford paying tuition and fees, and at the university level, these are precisely the ones that offer better quality teaching. With tax incentives, well-to-do students have their university professional training fully supported by the government, and thus they accumulate more and more political capital. Closing the loop, the reproduction of social inequality is achieved when these young people themselves become the dominant minority that control companies, schools and governments, thus feeding back the process. Conversely, the poor have to pay for their university professional training in tuition-based private institutions of higher education. Given such unfair conditions, poor youth graduate with prospects for lower income, higher unemployment and, eventually, social exclusion.

Recent democratic governments in Brazil have implemented three types of public policies to reduce inequality. First, broader social policies, such as conditional cash redistribution and similar

Most of Bahia's 13 million citizens are poor and reside in low-income neighborhoods

its people have African ancestry. Most of Bahia's 13 million citizens are poor and reside in low-income neighborhoods; only a few are middle- or upper-class people, and those are generally whites.

At the time of my nomination, UFBA was a middle-sized university of 20,000 students, the only federal institution of higher education in Bahia. Every year, we offered around 3,800 student slots in 55 professional courses and 750 slots in 61 postgraduate courses. Contrary to the local socio-demographic profile, non-black, elite families of Bahia made up our student body; no indigenous people had

The first one is related to the nature of the Brazilian state, which ideally should be an equity-promoting institution, but is not. The poor majority of the population is forced to send its children to inadequate public elementary and middle schools, unable to guarantee their access to higher education. Middle- and upper-class families send their children to private schools for basic education of better quality. Having more financial and technological resources, private high schools are more efficient in preparing students to pass the highly competitive test known as the Vestibular required to enter public

Photo caption: *Dustinci as vendae verum consequaspel int que volectus et est magni conseceaque perum aut optat eius et iniae. Lorit la nosant quibus nobisquiamus essus*

programs, aim at the most central of these inequities, the concentration of income. The second dimension comprises universal educational policies, including investments to improve public education, both in terms of quality and coverage. In a third dimension, specific and focused policies, involving redistributive or compensation programs, have been designed to complement universal policies.

In 2004, public universities in Bahia and in Rio de Janeiro first implemented affirmative action programs that included drastic interventions in selection processes such as social and racial quotas. Other institutions followed their pioneering examples. Today, 38 federal universities and eight state universities offer programs of social inclusion with different strategies of positive discrimination. The national media, representative of the dominant middle-class ideology, have promoted a public opinion campaign against affirmative action based on social origin and race-ethnicity. Recently, the Brazilian Supreme Court, in a striking, almost unanimous decision, voted that quotas in higher education were constitutional.

Brazilian universities have four types of social inclusion programs:

1. Extra points in the Vestibular score, based on public school attendance and racial origin (prevalent in state universities of São Paulo);
2. Ethnic and racial quotas, with definition of race by a verification committee (implemented by the University of Brasília);
3. Racial quotas, with self-definition, parallel to social quotas (predominant in Rio de Janeiro state universities);
4. Social quotas for public schools students, by course, with nested ethnic and racial quotas (the UFBA model).



Since 2003, UFBA has opened more opportunities to students from backward regions and socially disadvantaged backgrounds who have reached educational standards for higher education. With this aim, the university implemented three converging programs: additional student slots through new campuses and courses in regions outside the state capital; quotas for public school students, favoring poor blacks and indigenous candidates; and introduction of a new curriculum structure.

The quota system was approved in 2004 with the following design: 45 percent of the slots filled by students who attended secondary education in the public sector: of these, 85 percent reserved for blacks and 2 percent for indigenous applicants. Already in the first year of the quotas, UFBA recruited a number of blacks that was practically equivalent to their relative number in the population of Bahia. Before then, 30 percent of those admitted came from public schools; in 2005 this number increased to 51 percent, today it is around 66 percent. The first cohorts of quota students have graduated from several courses at UFBA. Evaluation studies reveal that the quota students' relative performance is at least as good as that of those who have entered through general selection.

In addition to restricted and socially selective access, the university system of Brazil is oriented by educational paradigms outdated in many aspects: academic, professional and institutional. A fragmented conception of knowledge prevails in our higher education system, inherited from the old faculty system and reinforced by the 1968 university reform conducted by the military dictatorship. In Brazilian universities, general education and some contemporary fields of knowledge are missing because we never had an academic architecture that could foster the intellectual background needed for a multidimensional understanding of the world, society and history.

This has produced serious academic problems that need to be urgently addressed. On the one hand, predominance of professional training makes the

university not responsible for the baseline education of its students. With the direct entry into university-level professional courses, at age 16 or 17, people are too young to make a decision about their life-long career. The choice of career is above all subjected to the socially exclusionary selection system to enter the university. At the same time, the exhaustion of the prevailing vocational university model in Brazil is evident. A strong disciplinary bias, choice of professional careers made too early, high dropout rates of students due to disenchantment with studies, mismatch between the rigidity in curricula and the broadness and diversity of skills demanded by the labor world, are problems that, to be overcome, require more comprehensive, flexible education models.

Maintaining its current curriculum structure places Brazil at serious risk of scientific, technological and intellectual isolation in the increasingly globalized world. After the creation of the U.S. and Canadian college systems and upon completion of the Bologna Process, which started in 1999, unifying the system of higher education in the European Union, there will be almost complete incompatibility between the Brazilian model of university education and those existing in other parts of the world, especially in developed countries.

In 2008, Brazil's Ministry of Education began to promote a university reform with an accompanying investment plan called REUNI (Program for Restructuring and Expansion of Federal Universities). The major objectives of this reform are:

- Expanded enrollment, with territorial and social inclusion;
- Expansion of funding and investments for public universities;
- Increase of teaching staffs;
- New forms of selection processes;
- Restructuring curricula;
- Revision of post-graduate programs.

After a long debate, the National Secondary Education Exam (ENEM) was restructured, aiming at replacing the Vestibular as the entrance examination for higher education. The Ministry of

Education broadened the scope and scale of the exam to make it a tool for selecting candidates based on their potential and aptitude rather than on the amount of information stored. In addition, a digital platform provides a unified on-line selection system, where the applicant introduces ENEM scores for multiple and flexible choices of educational institutions. Despite a series of logistical problems widely exploited by the press, this year 6.5 million people registered for the ENEM, which was adopted by 56 universities for the purpose of candidate selection.

At UFBA, using REUNI funds, we implemented a curriculum of learning cycles, compatible with the U.S. and Canadian university systems and the Bologna model in Europe. It includes a new kind of undergraduate course: the *Interdisciplinary Bachelor* (BI). The first-cycle BI offers a curriculum based on strong conceptual, ethical and cultural underpinnings, combined with a set of cross-technical skills, abilities and attitudes. A second cycle of studies is devoted to professional training in specific fields. The third cycle comprises post-graduate degree courses. Since then, 15 other federal and state universities have adopted similar models of curricular innovation.

Some of Brazil's academic establishment, led by traditional faculties, defensively reacted against proposals for the transformation of higher education of this type and, therefore, have tended to reject innovative models such as the BI project. They are representative of the structure of isolated, semi-autonomous vocational schools and faculties that, although characteristic of the old Brazilian universities, oppose building new forms of professionalism based on sharing, solidarity and social commitment that transcend corporate disciplinary boundaries.

The adoption of first-cycle undergraduate studies for all university students means they experience a common learning process with shared goals. This program exposes them to scientific, political, environmental and social questions, enhancing their understanding of their role in contemporary society and their



Photo caption: *Dustinci as vendae verum*

participation as citizens. An immediate benefit is enrollment in professional courses by more mature students, aware of their vocation, capable of critically analyzing decisions, carrying humanitarian, artistic and social attitudes and values. In strictly academic terms, the new model seeks to form a new student-professional profile, able to continually learn, understand and critically analyze scientific knowledge, skilled technically, but not alienated from humanistic, ethical and political issues. By understanding, during university education, how socio-cultural issues interact with work and life, students will be more respectful of community knowledge fundamental for achieving sustainable changes in society.

Re-elected in 2006, I was President of UFBA until 2010. I have witnessed a profound and broad change on the scene of higher education in Bahia and in Brazil. The State of Bahia now has five federal universities, all but one of them evolved from UFBA; together, they offer four times as many student slots as UFBA did alone 10 years ago. And the country as a whole has rapidly expanded higher education,

doubling the enrollment in public institutions. As a result, in 2010, 13 percent of the 18 to 25 age group were in universities; now, 8 percent of the total population have a university degree compared to 4.4 percent in 2000. Today, with a student body of 40,000 people, UFBA is a university much larger and with more diversity than before; currently, we offer over 10,000 places for entering students (1,600 in four undergraduate BI programs, 6,700 in 109 professional degree programs and 1,900 in 103 postgraduate courses). The student body now has a majority of students of African heritage, mostly from poor families from all over Bahia; and, although still in small number, Indian students from several Bahian tribes are graduating in many professional courses. The poor are now represented significantly in each and every course of UFBA, including those of higher social prestige.

We have made some progress, undeniably. But there is still so much to achieve. For too long, society and state in Brazil have made education not an element of social inclusion – which would be the duty of a democratic state as it is a

right for all – but rather a tool for the reproduction of social inequalities. Those who struggle to turn the University into a means for social transformation need to tackle the problem of inequity reproduced by the educational system. This is urgent and crucial, because in Brazil, unlike in other parts of the world, instead of a pathway to equity, education has been one of the main levers of a deeply perverse mode of construction and reproduction of an unequal and unjust society. Although recent initiatives of affirmative action and curriculum innovation for social responsibility have been successful in many public universities in Brazil, they have not yet spread wide enough to make a difference, given the magnitude of the social education debt resulting from the Brazilian heritage of colonial slavery.

Naomar Almeida-Filho, former president of the Universidade Federal da Bahia, Brazil, is a professor of epidemiology at the Instituto de Saúde Coletiva at UFBA.

Affirmative Action in Brazil

Challenges for Inclusion **BY MÁRCIA LIMA**

AFFIRMATIVE ACTION POLICIES CAN TAKE A person's race into account, the Brazilian Supreme Court unanimously ruled on April 26, 2012. The Court found the use of racial quotas constitutional, allowing both public and private higher educational institutions to reserve a certain percentage of slots for undergraduate students, most of them, coming from public secondary schools.

The Supreme Court ruling helps consolidate these new admission policies in an important way. A huge national public debate had swept Brazil because of the use of ethnic or racial criteria—blacks, browns (*pardos*) and “quilombo holdovers”—on the definition of potential grantees of these policies.

However, even with the Supreme Court's backing, the Brazilian government does not have the power to obligate education institutions to implement these policies. In general, the decision about adopting such policies is made in one of two ways. The first is through the approval of University Councils (*Conselhos Universitários*), governing boards whose autonomy is guaranteed by the Law of Guidelines and Bases of Education.

The second way in which higher education affirmative action can be adopted is through local state laws, adopted by state legislative assemblies. These two forums of discussion and decision reinforce the political aspect of affirmative action since they give rise to constant negotiations, with decisions often the direct result of social pressure from society and social movements.

To understand what is new about affirmative action in Brazil, we must consider the historical and political context of its emergence. Following that general picture, I will spotlight the “Program of University for All” (*ProUni*), the biggest program of affirmative action implemented in Brazil, an innovative system that has received relatively little attention.

THE CONTEXT

Economic growth in Brazil faces a big obstacle: its local labor force is poorly qualified because of inadequate investment in education. Universal primary school education didn't even get going in Brazil until the late 1980s. Even today, elementary school students perform poorly in math, science, and reading and writing literacy.

Widespread access to high school took place only in the 1990s; only half of all youngsters between 15- and 17 years of age now go to high school. At the university level, the situation is even worse: only 14.4 percent of Brazilian 18- to 24-year-olds were enrolled in higher education schools in 2009. This rate is considered unsatisfactory when compared to international patterns, including those of some neighboring countries such as Chile, Argentina and Uruguay.

Despite the persistence of inequalities, racial equity in the university system has definitely improved in the past ten years. In 1999, only 7 percent of black youngsters between 18- and 24-years-old were enrolled in colleges and universities, compared to 33 percent of whites. Ten years later, 30 percent of black and 60 percent of white youngsters were studying in schools of higher education. These advances are very recent, and continued: investments need to be made in the quality of education and expansion of access to reduce social and racial inequalities.

Measuring the effective expansion of the higher education system can be done by measuring the numbers of students



graduating as well as the number of new student slots available to potential freshmen nowadays. In this aspect, Brazil has showed important advances since the end of the 1990s. Between 1999 and 2008, the number of undergraduates surged from 1,534,000 to 6,148,000—although growth rates have declined for the last four years. The number of institutions—especially private ones—has also increased significantly. At the present time, 89.5 percent of higher education institutions in Brazil are private.

The quality of higher education is the biggest challenge. Two fundamental issues are the dichotomy between public and private institutions and the distinction between universities and colleges. In general, the public system provides better quality education, but both private and public higher educational institutions are very uneven. Universities make up less than 10 percent of the entire higher education system with 53 percent of those public and 47 percent private. Thus, affirmative action in public universities represents only 5 percent of higher education. Private colleges—mostly providing low-quality education—predominate.

Yet more and more students have gained access to education, thus decreasing social and racial inequalities. More students are graduating from high school, thus feeding into the university system, and access to higher education in Brazil is less unequal now than 13 years ago. Increasing social and political

demands for inclusion have generated policies of expansion of the higher education system and affirmative action, confirmed this year by the Supreme Court.

AFFIRMATIVE ACTION IN A BRAZILIAN WAY

The history of affirmative action in Brazil begins in December 2000. On that date, Anthony Garotinho, governor of Rio de Janeiro state, approved a local law reserving half the available slots available in undergraduate courses of public universities in Rio de Janeiro for students who had attended public high school. In November 2001, he approved another law establishing that 40 percent of the vacancies under the 2000 law must be reserved for black and brown students.

Since then, an increasing number of Brazilian universities have incorporated affirmative action policies into their admission processes. Intense debate about the place of affirmative action in Brazil revolves around two constituent elements of the Brazilian race relations system: racial identity and the dilemma of the relationship between race and class.

Many criticize affirmative action policies because they institutionalize the category of race. Those who take this standpoint say that the Brazilian state should not implement policies making use of racial criteria since this position strengthens the assumption of the existence of distinctive races. Indeed, they claim that this affirmative action model would

contradict the traditional concepts of race and racism in the country (which prides itself on being “race-blind”). These opponents of affirmative action policies say that the only way to face racism is to challenge the very notion of race. Affirmative action supporters respond that some social groups in Brazilian society exist identify themselves and are identified by markers connected to the notion of race (racial markers). By the same token, strong social hierarchies prevail in Brazil, with the resulting inequalities and discrimination produced by these racial markers, reinforcing this racial system. Therefore, supporters say that it is legitimate for the Brazilian state to create and promote racially-oriented policies to benefit individuals suffer who discrimination is based on racial markers.

Other critics of affirmative action points to the difficulties or impossibility of defining who is black in Brazil, because of its history of racial mixing, a process often proudly considered as a symbol of national identity. The question of racial identity had been debated in Brazil long before the issue of affirmative action arouse, but it has become more complex given selection of rights based on racial criteria. Affirmative action in Brazil is, in part, academically justified and legitimated by statistical studies on racial inequalities that make use of official data. Many of these studies lump black and brown into the same group with the label of “negros” or “afrodescendentes” (blacks or African-heritage Brazilians). The justification for this procedure is based on statistical analysis since the two groups present similar rates and performance (see Nelson doValle Silva, “Updating the cost of not being white in Brazil” in Pierre Michel Fontaine, *Race, Class and Power in Brazil*, Los Angeles: UCLA, 1986, pp. 42-55). However, what is highly polemical is that affirmative action policies transform racial classification into



Photo caption: *Dustinci as vendae verum consequaspel int que volectus et est magni conseceaque perum aut optat eius et iniae.*

racial identity. Some critics claim this categorization is based on a strategy, mainly led by black movements, to transform the descriptive categories “blacks” and “browns” into the political category *negros*, thereby generating an unfamiliar racial bipolarization between “negros” and “whites” into Brazilian race relations.

Some affirmative action opponents charge that class-based policies would be sufficient and effective in combating

racism, it does not have the power to force public institutions to include these policies as part of their admission processes. The only national program designed and managed by the federal government is the “University for All,” ProUni.

ProUni, created in 2004, seeks to provide partial or full scholarships to low-income students to study in undergraduate courses in private colleges and universities. The candidate for a ProUni scholar-

My research in the city of São Paulo has determined that this program has in fact given poor and black youngsters access to college-level studies. Otherwise, these students would have not been able to afford private college tuition or would have failed in the admission process for public higher education. The option to attend a private institution—in addition to the difficulty of being accepted into the public system—often involves several factors. For example, low-income students often need to both work and study; public institutions generally offer fewer night courses compared to private ones.

ProUni has proved to be very efficient as a way of decreasing of inequality of opportunity. However, since the program is designed for the private sector, it reproduces the problems that affect the formation of all students in this system. For example, few undergraduate courses are offered in prestigious fields such as law and medicine, and few jobs are to be found after graduation because of low-quality education. Our research finds that while ProUni improves the lives of youth, nevertheless, the level of improvement depends on which institution students attend and what field they study. Yet the program does allow some access to high-demand courses and prestigious private institutions. Therefore, ProUni can be regarded as a model for inclusion, but one that to a certain degree reproduces a level of inequality reinforcing the social stratification already present in the higher education system. Affirmative action policies must therefore be guaranteed for both public and private systems of higher education. Finally, the discussion about higher education must include private as well as public institutions.

ProUni, created in 2004, seeks to provide partial or full scholarships to low-income students...

racial inequalities, since in Brazil most poor people are black and brown. There are two counter-arguments to this perspective. First, statistical analyses show that racial distinctions exist among the poor, since social mobility is unequally distributed between blacks/browns and whites. Second, the Brazilian state and society have been historically indifferent to poor people mainly because they are mostly black or brown. In this sense, access to the higher education system through affirmative action is important because it allows entry into a place of former middle- and upper- class privilege mainly occupied by whites.

According to an analysis by João Féres Júnior, coordinator of Group of Multidisciplinary Studies of Affirmative Action, 90 percent of public universities using some type of ethnic or racial criteria in their admission processes follow socio-economic guidelines as well. Only four universities in Brazil apply purely racial criteria in their admissions process (<http://gemaa.iesp.uerj.br/>).

THE PROUNI CASE

The controversy about affirmative action in Brazil has focused on public universities, a small but significant part of the Brazilian higher education system. Although the Brazilian government is an important actor in affirmative action pol-

ship must have graduated from public elementary and high school and must have family income per capita of no more than the equivalent of three minimum wages. ProUni has adopted the quota system for candidates self-identified as black, brown or indigenous at the time of application for the scholarship. The percentage of scholarships reserved for those groups is determined by the percentage of these groups in the population of the candidate's state. The program offers as well scholarships for students with physical disability and enroll in an undergraduate course designed for further training of primary school or high school teachers in specialized subjects on the high school level. Scholarships are awarded on the basis of high scores in the National Examination of Secondary Education (ENEM). Private institutions receive tax credits for taking part of the program, and can decide whether to participate or not.

The nation-wide ProUni program has granted more than one million of scholarships in private institutions. Moreover, ProUni has managed to incorporate an affirmative action policy without creating huge polemics as in the public system. The main criticism of the program focuses on the low quality of the private higher education system and the high rate of tax breaks given to participant institutions.

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Universidad del Valle de Guatemala-Altiplano

From War to Progress BY ROBERTO MORENO AND RONALD CURTISS

MARÍA DEL CARMEN CUMATZ IS AN ELEMENTARY school teacher from a small town in the Guatemalan highlands in Sololá. In 2006 she became the first member of her family to obtain a university degree when she graduated with a teaching certificate from the Universidad del Valle de Guatemala-Altiplano. Although Guatemalan legislation does not require teachers to go to college (they are still certified by special institutes at the secondary level called Normal Schools), she wanted to be better prepared to make a difference in her students' lives. Opportunity arose when she heard about a scholarship

program offered by Del Valle with the support of USAID. After four years of attending a weekend program, she finally pursued her goal. All of her family proudly joined her for commencement. They never thought that such an accomplishment would be part of their lives.

Many such personal achievements are happening in this small university campus in the Guatemalan highlands. The site—the former Military Base of Sololá during the 36-year internal conflict—is now a place where education translates into development. In 1999, as a result of the Peace Treaties signed in 1996 in this

Central American country, the Guatemalan government leased the premises of the former military base in the small village of El Tablón to the Universidad del Valle de Guatemala to create an educational center. A symbol of war has been transformed into a representation of democracy and progress, training educators, technicians and engineers.

Del Valle, founded in 1966, is a private, non-denominational, leading university in science, technology and edu-

Photo caption: *I int que volectus et est magni conseceaque perum aut optius et iniae.*



cation in Guatemala. When it received the facilities of the former military base over a decade ago, its goal was to reach out to the largely Mayan population of the region through the implementation of educational, research and extension programs. During the past twelve years, Del Valle University has kept busy transforming the former barracks into lecture halls, dorms, science laboratories, distance learning facilities and research premises. The shooting fields have been transformed into agricultural experimentation plots. The effort has translated into community development programs, renewed agricultural practices, entrepreneurship, teacher training, food safety, health training, learning English, and capacity building.

The support of individuals, institutions, organizations and international aid has provided the necessary funds for scholarships, research, equipment and infrastructure. UVG seeks to provide individuals, families, and communities with opportunities for higher education. Social, economic, political and cultural barriers are being torn down and educational programs are having an impact on the quality of life of the indigenous Guatemalan population.

One of the most impressive sites on campus is a spot with a magnificent view of picturesque Lake Atitlán. Given this proximity, a campus research center was founded to contribute to the conservation of the lake. This body of water is not only a very significant part of the natural and cultural patrimony of the region; its basin also supports the various agricultural and economic activities of the communities, including tourism and extensive coffee plantations, as well as plots of corn, onions, beans, squash, tomatoes, cucumbers, garlic, strawberries, avocados and *pitahaya* fruit. Unfortunately, mistaken agricultural practices and the contamination produced by solid and liquid wastes poured directly into the lake have accelerated its deterioration, made all too evident by the florescence of cyanobacteria called *lyngbya robusta*. Since April 2010, a laboratory

has monitored the lake's water quality. Students have been actively involved in carrying out the various measurements and analyses.

Another important program on campus is conducted by the university's Center for Rural Development, which focuses on community and citizen participation, sustainable environmental management and natural resources, health, food safety, formal and informal education, economic development, and transfer of science and technology within a sound cultural approach. Supported by various organizations, this Center has identified, documented and systematized 24 good practices. It has developed educational modules to share these practices with technicians, students, and community members with low schooling.

A language center also operates on campus, offering English and Kakchiquel to groups of various ages and needs. The English program is offered in Sololá, Panajachel, and San Andrés Semetabaj through the English Access Micro-scholarship Program with the support of the U.S. Embassy in Guatemala.

Centro de Emprendedores en Acción, an entrepreneurship program set up at the university, seeks improvement in local farming and industries, teaching how to seek improved economic opportunities, develop a business plan, incubate an idea and establish a service and support chain. Various businesses in the areas of agriculture, forestry, services and tourism have been promoted through this important initiative.

All these efforts are complemented and enhanced through a continuing education program, which provides training in health, nutrition, education, technology, tourism, environment, computer skills, decentralization and local power, and agroforestry. It is not rare to find a class of school children visiting the library and hearing a storyteller, a group of indigenous women participating in a workshop, or some local farmers receiving training in a particular field. Most beneficiaries come from the departments of Sololá, Totonicapán, Quiché, and

Chimaltenango, although the participation of individuals coming from all the other departments is increasing every year. So far, about 50,000 persons have taken part in the various continuing education activities. *Universidad para todos (University for All)*, a part of this initiative, offers non-formal education on environment, agriculture, education, technology, health, and nutrition. Classes are imparted on the last Saturday of every month, and participants pay only a symbolic amount of a little over a dollar (10 quetzales) per workshop.

Both elementary and secondary schoolteachers are being trained on campus, contributing to the improvement of the quality of education in the Guatemalan highlands. The university has led an effort to develop a new methodology for early reading and writing and is working very closely with teachers from Sololá, Quiché, Totonicapán and Huehuetenango, particularly with the support of USAID.

Professors, researchers and students from various American and European institutions have been attracted to UVG-Altiplano. It is frequent to see a group of visiting scholars on campus, paying attention to the interesting mix of science and technology, education, and multiculturalism. Besides this, being on campus is a life-changing opportunity to witness first hand the profound transformation that is taking place in the area: a vivid story of leaving war behind, working out differences and moving towards progress.

UVG-Altiplano has launched innovative models based on the actual needs and views of the surrounding communities. The Peace Treaties have come to life in a leading educational institution that is preparing technicians, engineers and schoolteachers, the future agents of change required for the development of the Guatemalan highlands.

Roberto Moreno is the President of Universidad del Valle de Guatemala. Ronald Curtiss is a Mathematics Professor and Moreno's student in a graduate program on Educational Coaching.



STUDENTS AND SOCIAL CHANGE

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Student Activism

Utopian Dreams **BY JAIME PENSADO**

"DEMOCRACY, HERE? THAT IS A JOKE!" remarked Veronica, one of the thousands of *"rechazados"* who failed to be admitted to Latin America's largest public university (UNAM) and leading representative of the "Yo Soy 132 Movement." For this 19-year old student, who preferred her last name not to be used, Mexico has simply "ceased to exist" as a nation. What Mexico and the rest of the continent needs to guarantee some sense of economic and political independence, she reaffirms with passion, "is a spiritual revolution led by our youth. We must unite to destroy the neoliberal structure once and for all! Call me utopian, but I just don't see another solution to our otherwise bleak Latin American reality."

Many might indeed dismiss Veronica's dreams as simply "utopian," as she, herself, reluctantly suggests. But Veronica is not alone. Today thousands of students from all over Latin America are protesting for different motives, and like Veronica, they too are calling for continental unity with young students at the vanguard. The most militant young activists in Chile, Venezuela, Argentina, Bolivia, Puerto Rico, Mexico, Colombia and Brazil are demanding deep structural changes to radically transform the societies in which they live. Others are protesting to obtain specific university reforms, and aware of the rich history of student activism in Latin America, they are demanding respect to academic

freedom, democracy and university life.

Scholars have traced the first student uprisings to the 17th century, but a championing of youth as active agents of political and social change is a fairly recent phenomenon. Ricardo Flores Magón, Jose Vasconcelos, Julio Mella, Raul Haya de la Torre, Fidel Castro, Che Guevara, Carlos Fonseca, José Mujica, and Dilma Rousseff (among many others) initiated their "revolutionary dreams" as young student activists, and once in power, they all recognized the importance of youth in their distinct visions of the Americas. Every single decade of the 20th century, in fact, has witnessed a significant student uprising and all of the most influential parties in Latin America have tried to



Photo caption: *Dustinci as vendae verum consequaspel int que volectus et est magni conseceaque perum aut optat eius et iniae. Hit aut volupti occum autecuptaqui auteNe porae vercia ipit volentissum et, veliqui cus.*

co-opt and/or negotiate with disgruntled student activists by creating their respective youth wings. In particular, there have been three key moments when Latin American students shook up the status quo and in so doing assumed the role of key protagonists in history: the 1920s, the more turbulent 1960s, and more recently, the anti-neoliberal 1990s-2000s.

I. 1890S-1920S

"The youth you are now living is a form

of power; it is you who must employ it."—
José Enrique Rodó

As positivism, or the application of scientific management to direct human progress, began to show signs of decadence at the turn of the 20th century, youth captured the attention of influential intellectuals across Latin America. The Uruguayan José Enrique Rodó emerged as the most influential of these writers as a result of his famous essay, *Ariel* (1900) in which he celebrated youth as a "heroic idea" and as the "promising future" of the Hispanic continent. He called upon young *universitarios*, in particular, to assume more active roles as "missionaries" and "philanthropists." Echoing Rodó's words and in direct response to the Spanish-American War of 1898, the Argentine writer Manuel Ugarte also saw youth as a promising collective identity capable of taking a more critical stance against the physical and spiritual invasions of the imperialist North. José Vasconcelos and Pedro Henríquez Ureña expressed similar sentiments in Mexico and Central America. For these young *arielistas* (who embraced *Ariel* as a political manifesto), the idealized future depicted by Rodó required the rejection of the "cannibalistic dogmas" of positivism in favor of the "Christian values" and "beauty" that the Hispanic continent shared. In particular, they encouraged their fellow students to shun the materialistic aspects of the North, the detrimental consequences of Social Darwinism, and the fetishism of positivist science, which they saw as engrained in the Latin American educational system.

The language of social justice and independence that characterized the Mexican and Bolshevik revolutions (1920-1917) further spurred young Latin Americans to envision a new era of great hope. In contrast, for an increasing number of university students the culmination of World War I awakened a new feeling of unprecedented doubt in Western civilization. Similarly, for many students and rising intellectuals, the 1929 economic depression signaled the

"inevitable demise" of capitalism.

In this ambivalent environment of despair and great hope, the Argentine writer José Ingenieros encouraged young Latin Americans to accept social responsibility and embrace a stronger sense of nationalism and hemispheric solidarity. But first, he warned students, it was crucial to reform the archaic institution of the university, which had failed to adapt to the new Latin American reality. In agreement with rising intellectuals in Mexico, Peru, Chile and Uruguay, he argued "the university ought to be a school of social and political action." Together, they called for a democratization of Latin American universities and argued that the control of these institutions needed to be wrested away from the elites so that higher education would be available to all who could benefit from it, regardless of their social or economic standing.

It did not take long for Ingenieros' words to be heeded by Latin America's most politicized students. In 1918, a group of Argentine *universitarios* launched their famous Córdoba manifesto. Here, the young *reformistas* demanded full university autonomy, greater academic freedom, broad-based university reform, and the creation of representative student organizations on faculty councils, which they viewed as corrupt and authoritarian. In contrast, the reformists argued, "youth" was surrounded by "heroism." It was "disinterested" and "pure," and by definition was the rightful creator of the modern educational institution.

After a series of massive student strikes and negotiations with Argentina's president, the young reformists won a number of important victories that would impact student lives of throughout the continent. The most important of these included university autonomy and the creation of *co-gobiernos* (equal division of power among students, faculty, and alumni) inside the universities. Similar student strikes soon followed in Uruguay, Cuba, Venezuela, Chile, Peru, Mexico and Colombia, where the concept of university autonomy was further redefined to meet their unique academic



Photo caption: *Dustinci as vendae verum Uri bla quide velit at empore, quiae senis non*

interests. Simultaneously, Latin American university students organized numerous international conferences, gave public speeches, founded the first student societies, expressed the need to create solidarity networks with the working class, founded “popular universities,” and put out publications characterized by a more continental outlook and concern for the political and socioeconomic problems of their respective societies. Here, the students also came to see youth as a positive collective identity. They were introduced to and reacquainted with a wide range of old and new ideologies, such as Marxism, anarcho-syndicalism, and Christian Democracy and many became key participants in the creation of new communist, socialist, nationalist, and conservative parties.

Moreover, in these new spaces students were able to debate what they perceived to be the most pertinent national and international issues. These varied tremendously in content, from the use of natural resources and agrarian problems to specific questions about the possibility of creating political alliances with the working class. Of particular importance was the role young *universitarios* should

play in bringing about a more equitable future for all Latin Americans based on economic and political justice. However, the national issues that appeared to have generated the greatest debates during the student congresses were education and presidential elections. Despite the deep distrust that students expressed regarding older authorities throughout this period, Latin American *universitarios* continued to see their respective governments as the supreme authority for guaranteeing social and economic progress.

A variety of international issues and events also captured the attention of *universitarios* at the student congresses. The specific themes varied from presentation to presentation, but the majority usually shared a common factor: a deep distrust of “*imperialismo yanqui*.” In particular, students expressed great concern over “dollar diplomacy” and overwhelmingly opposed the financial privileges enjoyed by North American entrepreneurs with regard to Latin America’s natural resources. In addition, university students expressed great dissatisfaction with the U.S. military presence in Cuba, Puerto Rico, Nicaragua and the Dominican

Republic; they were particularly outraged by the increasing influence the U.S. government wielded with regard to the internal affairs of those countries.

In sum, *universitarios* of the 1920s were able to portray themselves as a responsible “student class” worthy of social and political rights. As reflective of their elitist upbringing, they saw education as a panacea to Latin America’s most detrimental problems, and influenced by a series of international events and key figures such as Martí, Rodó, Dario, Zapata and Sandino, they led the first important wave of student activism that guaranteed university autonomy throughout the Spanish Americas.

II. THE 1960S

The 1960s saw the emergence of a distinct spirit of revolution and reactionary violence. From this tension emerged an innovative sense of “liberation” primarily epitomized by the Cuban Revolution and the emergence of new iconic leaders, including Fidel Castro, Che Guevara, Mao Tse Tung, Patricio Lumumba, Herbert Marcuse, and Camilo Torres. For *universitarios*, the term liberation became the key words of the day. Linked to the Arielista awareness of international solidarity, the term served as part of an innovative language of dissent used to articulate with urgency the students’ opposition to capitalism, imperialism, and reformism. But liberation meant something broadly cultural as well; it allowed them to construct a collective identity that opened the possibility for alternative lifestyles and new countercultural spaces of expression.

Student manifestoes, bulletins, and newspapers, as well as films, comics, and academic journals produced and consumed at the various universities influenced in the explosion of new student organizations and in the revaluation of the importance of ideology. Students demanded the improvement of school facilities, but more significantly, they defended the autonomous status of their

universities, redefined the importance of Marxism, discussed the multiple meanings of the Cuban Revolution, participated in the rising feminist movement, and challenged what they saw as the “traditional” values and norms of the status quo. On the other hand, the new student culture that emerged in the 1960s also factionalized the university. It introduced new forms of student violence that students welcomed to compete with the police and other “reactionary” forces that came in defense of the “status quo.”

As in other parts of the world, the tensions took place in the forms of street barricades, guerrilla theater, and polarizing *asambleas* that peaked in both numbers and intensity during 1968. The most violent of these clashes took place in the Plaza of Tlatelolco in Mexico City where more than three hundred students lost their lives. But violent clashes between the police and the students also took place in the streets of Bogotá, Sao Paulo, Buenos Aires, Guatemala, Quito and Lima. In each of these places, students not only celebrated the Cuban Revolution, but also demanded an end to the rising military dictatorships in the Southern Cone, embraced the teachings of Liberation Theology, protested against the brutal War in Vietnam, condemned the U.S. and Soviet involvement in the Third World; and in so doing, they influenced other youthful uprisings in Europe and the United States. They played protagonists roles in the rising sexual revolution and the global counterculture. They joined distinct guerrilla movements and participated in various artistic movements to break the chains of colonialism, exposed the growing economic and political gap between the few in power and the overwhelming impoverished majority, and pressured the hierarchy of the Catholic Church to take a more active role in minimizing such gap.

III. THE 1990S-2000S

Marginalized sectors of Latin America have been at the forefront of massive uprisings against neoliberalism: “el caracazo” of 1989 in Venezuela, the Zapatista

rebellion of 1994 in Chiapas in southern Mexico, the Cochabamba water wars of 2000 in Bolivia, and the “saqueo” riots of 2001 in Argentina. Unlike previous revolts, these were distinguished by their participatory democracy and “horizontalism.” In each of these cases, marginalized communities and disenfranchised workers self-organized from below and rejected what they saw as the historical vanguardist approach of the left. Moreover, in each of these cases, the Internet played an important role in providing a means for the rapid dissemination of information that was otherwise ignored and/or distorted in the mass media.

For Latin American students the neoliberal project has meant steady increases in tuitions. The threat of privatization has transformed secondary and higher education from a historical right into a market commodity. Nonetheless, influenced by the horizontalism of the popular uprisings of the 1990s, students have launched a number of massive revolts that have prevented a complete privatization of their schools. The first of these massive strikes took place in 1999 when Mexican students took possession of the UNAM campus and nearly paralyzed the educational system for more than nine months. Soon, others would follow: Chile in 2006 and 2011; Colombia and Puerto Rico in 2011; and Mexico, again, in 2012. As Veronica explains, “we are tired of receiving a second rate education. The educational system in Mexico has produced one of the most unequal societies in Latin America.” Indeed, the level of poverty continues to increase yet social expenditure on education and other social programs continue to be reduced, as dictated by the International Monetary Fund (IMF) and the World Bank. “As students,” she continues,

We must learn from our rich history of student activism and regain control of our destiny. The entire educational system must be changed radically so that we, ourselves, can make it more inclusive and democratic. The same is true of the means of communication, the agricultural and labor sectors, and the

health care system. Students throughout Latin America are sick and tired of engaging in useless negotiations with our governments. Like the Zapatistas, we say ‘*basta*.’ Enough is enough! We will continue to take over the streets and schools of Mexico City, Buenos Aires, San Juan, Lima, Santiago, and Sao Paulo until our respective governments guarantee us a better future, no longer with empty rhetoric and antiquated leftist promises, but with concrete policies and actions.

The student mobilizations that are taking place in Caracas and La Paz further demonstrate that the activism of today is not ideological. Latin American universitarios have demonstrated that they are willing to pressure leftist and conservative governments, alike. This latest wave of student activism has, in fact, distinguished itself for its pragmatism and conscious rejection of all forms of authorities and ideologies, as Veronica and other members of the Yo Soy 132 Movement suggest. Like the arielista generation of the 1920s and the more militant activists of the 1960s, they too have called for greater continental solidarity. Twitter, Facebook, and youtube have replaced the conferences of the 1920s and student newspapers of the 1960s. Images of Che Guevara are still waved during student marches. Yet, Marxism and other orthodox leftist ideologies seem to have lost resonance. Instead, this latest generation of Latin American activists have complemented their struggles to end the inequality of the educational system with a variety of new flags, including the rainbow flag for same sex marriage. “Respect for all human rights, Veronica concludes, “has become our central priority. Utopian dreams for a better Latin American reality will continue to be expressed in the streets until those in key positions of power start taking us seriously and begin listening to our demands.”

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Chile's Student Protests

The Original Sin of Educational Policy **BY PETER M. SIAVELIS**

LESS THAN A DECADE AGO, ACADEMICS AND journalists almost always referred to Chile as a “model” country, praising its economy, political transition and democracy. Always a simplistic characterization, it nonetheless stuck for many years, until the unexpected 2011 explosion of massive student protests and social mobilization. These events have transformed comments on Chilean democracy from praise to perplexed, with more questions than answers. How is it that widespread and sustained student mobilizations have broken out in Latin America’s peaceful and prosperous poster child? How did simple protests over student bus fares evolve into a massive social movement challenging not just the educational system, but the country’s entire economic and social model? Why has the government been incapable or unwilling to respond to student demands? Just as the student protests concern much more than the details of educational policy, the answers to these questions require a more realistic evaluation of Chile’s “model” transition and economy. Indeed, the protests are a logical outgrowth of a deal struck at the outset of the transition. Until the terms of that deal are renegotiated, protests will continue.

The more immediate roots of today’s protests can be traced to the 2006 *Revolución de los Pingüinos* (the Penguins’ Revolution—named for students’ black and white uniforms) that began under the government of Socialist President Michelle Bachelet. She was the last of four presidents heading the Concertación coalition, which ruled Chile, by most accounts very successfully since 1990. The protests were sparked by rumors of a price increase for college admissions tests and changes to the highly subsidized student bus pass. The protests quickly escalated into demands for scrapping the

much-hated LOCE, or Organic Education Law, imposed by the Augusto Pinochet regime and an end to the municipality-based educational system it established. More than three-quarters of a million people, from students to parents to other elements of civil society, mobilized in favor of reforms to the deeply unequal dual system of public/private education that characterizes Chile from primary school through higher education.

The protests subsided for several years, less as a result of progress on the educational front than because of the personal popularity of Michele Bachelet and her acumen in managing an economic crisis that threw most of the rest of the world for a loop. However, an end to the Concertación’s twenty-year rule and the right’s first electoral victory in 52 years with the election of President Sebastián Piñera re-opened the floodgates of protest. In a sense, despite the explosion of protests in 2006, the center-left still chafed at protesting “against its own” when it hit the streets during Bachelet’s government. Piñera’s March 2010 inauguration, combined with a number of actions taken by the new government to deepen the privatized educational system, removed this constraint. The protests grew in scope during 2011, returning to and widening the initial demands of the 2006 student leaders.

Once again, the LOCE was the main target at first. After ruling Chile with an iron hand for 17 years, the Pinochet regime shackled Chile legally with a series of organic laws that were difficult to reform. The LOCE was one of these. It provided for a partially privatized system at all levels of education. At the pre-college level it created three tiers: municipal public schools, state subsidized private schools, and completely fee-paying private schools. The latter were largely the

province of Chile’s elites. Higher education was even more deeply privatized; 88 percent of higher education institutions in Chile are private and 78 percent of students attend private universities. The state has also ceased to be the major provider of higher education funding. Before the dictatorship, 90 percent of the higher education budget came from the state, while in the post-LOCE era it diminished to only 10 percent, with the remaining costs transferred to individuals. As a result, among 31 European and Latin American countries, Chile has one of the lowest levels of public expenditure on public education.

Privatization also resulted in the proliferation of private universities and technical institutes. While some are of very high quality, a great many are store-front technical institutes designed to enrich their owners. Though all private universities are officially nonprofit, multiple schemes allow university owners to earn money through charging for construction services, building rents or “consulting” fees. Indeed, part of what spurred the initial protests under Piñera were revelations that then Education Minister Joaquín Lavín owned shares in the *Universidad del Desarrollo*, one such institution.

But more than fighting privatization *per se*, student protests target its effects. Essentially, Chile has two sets of elite universities: the so-called traditional universities (generally considered the University of Chile and the Catholic University of Chile) and other small, expensive and very exclusive private ones, located outside Santiago and often high up in the posh neighborhoods that wind up the *cordillera de los Andes*. The social networks that students establish at these universities assure entrance into (or more likely preserve one’s place in) the upper class. Admission is based almost



exclusively on the Prueba de Selección Universitaria (PSU) test, Chile's version of the SAT, generally with a required score of above 600 points. Nonetheless, while fee-paying private high schools graduate only about 10 percent of Chilean students, they make up roughly 60 percent of those that receive this score, meaning that both sets of elite universities are fed by equally elite private high schools. This reality has unleashed a heated discussion on class, classism and the reproduction of privilege in Chile. A very public debate played out in the press regarding the so-called *Universidades cota mil* (or universities located at an elevation of 1000 meters). Most of the exclusive universities are located here, with new and sophisticated infrastructure and U.S.-style campuses. Some commentators alleged that these universities' wealthiest students had never been to downtown Santiago. Rather they remained ensconced in exclusive enclaves in the neighborhoods of *Las Condes*, *Vitacura* and *Lo Barnechea* from primary

school all the way to college and into their professional and social lives.

The high cost of universities is another target of the protesters. Middle-class families spend 40 percent of their income per child on tuition expenses while children are in college or professional institutes—higher than any other OECD countries, including the United States. This is after spending enormous amounts on private schools up to that point. In Chile, students (and their parents) have to finance most of their education (85.4 percent). This is much above the global average of 31 percent and the OECD average of 24.3 percent. Tuition has increased by 60 percent in current dollars in a decade. These costs, combined with the length of many degree programs (6 to 9 years), have resulted in skyrocketing indebtedness for lower and middle class students. When combined with the dismal 50 percent college graduation rate and the difficulties new graduates from non-elite institutions face in finding jobs,

Photo caption: *Dustinci as vendae verum consequaspel int que volectus et est magni conseceaque perum aut optat eius et iniae.*

students find themselves mired in debt with few opportunities.

Protesters faced these realities anew with Piñera's victory, though with a different cast than in 2006 in terms of demands, leadership and methods. While demands for ending municipalization and privatization remained, protesters also pressed for greater government financing for public universities and reformed admission standards for prestigious universities, with less emphasis on the PSU. The students wanted accreditation standards tightened and an end to public support for poor quality institutions. They demanded enforcement of the law against profit in higher education, the prosecution of those who use loopholes to get around the prohibition, and an end to the proscription of student participation in university governance. Most central,

however, was their demand for free universal education for all Chileans.

The attractive personalities of the leaders appealed to the public eye. The leaders approached the status of pop stars—particularly Camila Vallejo president of the Student Federation of the University of Chile (FECH). Prominently featured in the *New York Times Sunday Magazine* and *Time*, and chosen as the person of the year in an on-line poll of the UK's *Guardian* newspaper, she exuded the spirit of Chilean youth culture. Though a Communist, she shunned traditional ideological politics and provided inspiration for expanding student movements across Latin America. Along with the student leader of the Federation of Students of the Catholic University of Chile (FEUC), Giorgio Jackson, and Camilo Ballesteros of the Student Federation of the University of Santiago de Chile (FEUSACH), these young telegenic spokespeople provided an appealing public voice for the students' demands. The students enjoyed widespread international and domestic support, with invitations to travel around the world, including Vallejo and Jackson going to Europe to speak before UNESCO. Among the Chilean public support for the student movement more generally approached 80 percent at the height of the protests.

The protesters' methods also creatively combined the new and the old. The time-tested and traditional *cacerolazos* (the banging of pots reminiscent of the Salvador Allende era) were resurrected, and these demonstrations were often organized through Twitter. Several creative acts received extensive domestic and foreign media attention, including flash mobs, a zombie walk in front of the La Moneda presidential palace (a metaphor for Chile's "walking dead" educational system), as well as kiss-ins and a massive "pillow fight for education." Despite these lighthearted methods, the protests have had serious consequences. Public elementary and high schools and some college departments (*facultades*) were completely shut down and occupied, and students forced to lose a year of schooling. Massive demonstrations continued, mobilizing up

to two hundred thousand demonstrators, with others turning violent. At the height of the protests in August 2011, almost 900 protesters were detained and police cordoned off the streets and used tear gas, with protesters setting fires in the streets and reports of 100 injured police. One student has been killed, and many were injured and arrested.

Protests continued into the 2012 academic year, with growing student determination and intransigence in response to government policy overtures. The Piñera government responded by creating a Superintendence of Higher Education to oversee and regulate higher education institutions, promised to monitor educational profiteering, lower loan rates, and increase student aid. Still, government efforts fell far short of the students' demands.

The intransigence on both sides grows from the understanding that the story of educational reform began long ago, at the outset of the democratic transition. The tacit deal that held Chile's "model" transition together was an agreement to avoid deep reforms to Pinochet's economic model. Indeed the sanctity of this model was the Achilles heel of the transition, and Concertación politicians knew that reforms that threatened veto players on the right would derail it. Privatized education was one of those areas. So while government officials talk about piecemeal reforms around the edges of the educational system, the protests have become about much more than education. Fundamentally, they are about delayed justice and postponed fairness. Chileans feel that the fruits of the country's economic success continue to be funneled to the top, within a system rigged to underwrite the continuing power of economic elites. The private educational system is central to how the system is rigged to perpetuate inequality, as just another component of a market model that consistently privileged growth and wealth over equity. This dissatisfaction has also spread to the political system, which is increasingly perceived as unrepresentative and lacking in real competition. Rather

than a "model" democracy, Chileans see one characterized by the rotation of elites that are out of touch with the needs and demands of ordinary Chileans.

This does not signal the death knell for Chile's much vaunted market model, nor an assured victory for the protesters. Rather, the political dynamic operating in Chile is more complex. Though the students continue to enjoy widespread public support, the likelihood of an absolute or definitive victory for either the students or the government is unlikely. While Chileans object to the massive inequality created by the tacit agreement to leave the fundamentals of the Pinochet economic model intact, they really do not question market economics, which are perceived by most to have brought impressive growth and development to the country. While the world is mired in recession, construction cranes dot the Santiago skyline, the economy is dynamic, and the country's growth remains on target. Rather than throwing away the whole model, Chileans want a social market economy that better distributes the fruits of Chile's success and ceases to funnel resources mainly to the top.

Indeed, many Chileans doubt the benefits of free universal education. While such a formula might work well in a country with an already level playing field, in a country like Chile, with the highest level of inequality in any country in the OECD, free education might only subsidize education for the rich and may do little to thwart inequality. At a deeper level, the only way for Chile to resolve the current impasse is to atone for the original sin of educational policy that grew out of the democratic transition and to somehow strike a bargain between maximalist demands of students and a negotiated settlement that transforms the educational system from a perpetuator of privilege into an engine for equality.

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Venezuela's Student Movement

"Either We Fight for Education or We Lose It" BY ERICK ROZO

STUDENTS IN VENEZUELA HAVE AN 84 PERCENT confidence rating in polls among the public, higher even than the Church or banks, according to www.datanalisis.com.

Our struggle for democracy sometimes feels like the struggle of David against Goliath. However, we insist on following democratic paths with a determined spirit that we hope will be contagious. As students, we try to make our voices heard as protagonists, rather than spectators. Our current goal is to spearhead voter registration even in the most remote areas of Venezuela. Organization is extremely necessary if we are to succeed in reestablishing democracy. In the last few years, we students have mobilized to change the country, at the same time as we seek to maintain the right to free expression.

In Venezuela, bad public administration has led to deplorable conditions in

the country's public schools. Thus, from an early age, young people have learned to fight for the right to have a good-quality education. Our struggle has been hard, but our hopes are still as high as on the first day that we began to protest for the right to free expression, to think and dream differently.

As I think of my own experience, memories of my schooldays bring a smile to my face. I attended school in a poor area of Caracas, one of those neighborhoods where residents live with hope but also with the fear of not knowing if they will get home safely. During my elementary and high school years, I learned about the great protagonists of Venezuelan history, especially the role of youth and students in the construction of its democracy: the Generation of '28, irreverent youth who took a firm stance against anti-democratic

Photo caption: *Dustinci as vendae verum consequaspel int que volectus et est magni conseceaque perum aut optat eius et iniae.*

forces and dictatorship, followed by the "Generation of 1958," youth who courageously led in overturning a dictatorship and became active in our political life for the next fifty years.

It was encouraging to learn that other generations of young students all over the world had also engaged in struggles for social justice. So by the time I got to the Central University of Venezuela (UCV) in 2007, I was steeped in such history and worldview. However, we Venezuelans are constantly told that we need to study a field that will lead to economic success rather than follow our passions and study for the sake of intellectual fulfillment. I was no exception. My parents



urged me to get my undergraduate degree in computer studies.

At about the time I started my university studies, a series of events resulted in a crackdown on freedom of expression in Venezuela. The country's most established television station, Radio Caracas Televisión (RCTV), was shut down. The government of President Hugo Chávez engaged in a series of arbitrary actions against the press. These attacks sent the student movement into the streets. As a student at UCV—Venezuela's main university—it was impossible for me not to join the mobilizations, many of them protests in favor of freedom of expression. Despite the protests, the national government enacted budgetary measures that asphyxiated Venezuelan higher education, a blow that motivated students to organize nationwide to join forces against an increasingly authoritarian government. We then took up the banner of struggle against a constitutional reform that the government sought to impose

through a plebiscite. And with joy I confirm that we won! It was one of the most important elections ever held in Venezuela, and the government of Hugo Chávez lost. And not only that: he didn't lose the election to some political party or other. He lost it to the students, who overcame fear and took to the streets to fight for our rights today and to dream of a future different from what the present government offered and continues to offer us.

I became thoroughly engaged in politics, involved in student efforts to pay back to Venezuela what it had given us through free education. I decided to change my major from computer studies to international politics. We began to develop a student movement that grew from year to year and now numbers two distinct generations of student protesters against government abuses.

Students and workers joined together in hunger strikes for better salaries and for fair student loans; we staged several marches against budget cuts and

demonstrated for union rights. Engaging in political activism provided the backdrop to my studies as a future professional in international relations, or it may even lead to a political career. Indeed, many young people today—including myself—are asking questions about our future involvement in politics. Our activism contrasts with the relative disinterest of recent generations.

The formation of the student movement was a team decision, a decision of classmates interested in the struggles for rights by and for students within our university. It was a grassroots movement, a local activism that began to extend outward, replicating local activities on the national scene.

In November 2011, we decided to turn our Federation of University Centers into the chief student representative body, bringing together students centers according to their fields of study. This grouping of students and the subsequent formation of local leadership teams



Photo caption: *Dustinci as vendae verum consequaspel int que volectus et est magni conse-
ceaue perum aut optat eius et iniae To quas nulpribus doluptatum et accatecerum faci*

have strengthened and legitimized our struggle, which has extended even to students not involved in the federation. We managed to hold elections even though government repression had prevented many such student elections, as well as elections for rectors; thus we sought to confer legitimacy on our *compañeros* in other universities by providing them with an umbrella organization.

This new generation to which I belong is organizing a nationwide civic project that involves professors, students, office workers and laborers. All of us have gathered together for a common cause: the university and the universality of free thought. Our sort of movement has already brought about changes in several countries. These are not individual or partisan movements: they bring about an authentic union of hundreds and thousands of youth who have been struggling through non-violent actions on the streets to assert our rights in the face of an authoritarian regime that has

monopolized public power and done away with political independence.

Until recently, the National Electoral Council (CNE) hindered the registration of new voters (mostly young students). We took action by chaining ourselves to CNE headquarters demanding that voter registration centers be set up on campus. Soldiers beat us up, sent out to silence us and to repress our peaceful protest. Such violence against peaceful protesters made me understand Gandhi's saying, "They will have to beat us as they beat water—until their arms get tired."

We are not giving up. We work to find a strategy to effectively register young voters to support the electoral campaign in its democratic spaces; we continue to criticize; and above all, we continue to unite all our efforts during this new critical stage. This is a time when students—and, above all, young students—

are called upon to defend the university. Unlike other generations, we have had to live 14 years under "socialism," which has ended up eroding our democratic institutions. Our commitment is to defend education and its vision of free expression as the principal weapon to confront authoritarian governments.

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Is Brazil Part of Latin America?

A REVIEW BY ALFREDO CÉSAR MELO

Nossa and Nuestra América: Inter-American Dialogues,
By Robert Newcomb (*Purdue University Press, 2012, 264pp*)

Robert Newcomb's *Nossa and Nuestra América: Inter-American Dialogues* is a must-read study on Latin American social thought that deals with the tense and productive relationship between Spanish America and Brazil. The book made me realize how the underlying forces structuring this dialogue—so well described by Newcomb—are still very active in the interactions between Brazilianists and Hispanists within the intellectual field

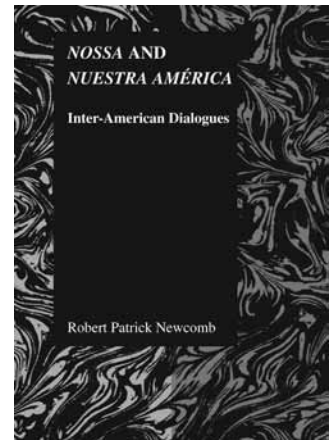
Brazil and Spanish America as part of an Iberoamérica, Brazilian *letrados* such as Joaquim Nabuco (1849-1910) and Sérgio Buarque (1902-1982) emphasized the specificities of Brazil vis-à-vis Hispanic America. It is fascinating to realize how the dialogue between these two cultural traditions is fraught with contradictions, misunderstandings and misconceptions borne by both sides.

A few examples: Rodó clearly understands the Latin American part of the continent as a cultural unity (as opposed to a political one) encompassing Brazil as part of that unity. His knowl-

promoting the cultural exchange between Brazil and Mexico (and Spanish America, as the good *aristocrat* he was). Reyes believed that Spanish and Portuguese were languages that could benefit from exchange and “cross-fertilization,” and always added some words in Portuguese in his articles as a way to refresh his prose. According to Reyes, the Spanish speaker and the Portuguese speaker could always understand each other, and this possibility of mutual understanding was interpreted as a sign of vitality of Latin America culture.

There were, however, some fissures in the discourse of mutual understanding. In private letters, Reyes complained about his intellectual isolation due the language barrier. According to Newcomb, Reyes “described Portuguese—and his inability to speak it—as contributing to both his sense of loneliness and Brazil’s apparent intellectual isolation.” If Spanish and Portuguese were languages so indistinct from each other, as Reyes would like us to think, why did he feel such malaise about the gap between them? Why, in Reyes’ view, was Brazil so isolated?

Newcomb answers these questions by means of the essayistic oeuvre of two major Brazilian intellectuals:



Joaquim Nabuco and Sérgio Buarque. Both of them were monarchists who believed in the superiority of Brazilian institutions (because of the monarchy) vis-à-vis their South American peers. When Brazil became a Republic in 1889, Nabuco feared the “South Americanization” of Brazil. He believed that the Brazilian political system was more mature than that of any other country in South America—a world plagued by political upheavals. If for Nabuco and Buarque the political institutions of Brazil did not resemble the Hispanic American ones, the cultural differences were even greater. Nabuco and Buarque identified more cultural affinities and similarities between Brazil and Portugal than Brazil and Spanish America.

In his most important essay, *Raízes do Brasil*, Buarque compares Spanish

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of Latin American Studies in the United States.

According to Newcomb, the relationship between Spanish America and Brazil could be defined “on one side by Spanish American identity projection” and “on the other by Brazilian affirmation of national singularity.” Whereas Spanish American intellectuals such as José Enrique Rodó (1871-1917) and Alfonso Reyes (1889-1959) highlighted the commonalities of

edge of Brazil, nonetheless, is quite limited. Newcomb notes that in Rodó’s *Obras completas* there is no reference to any Brazilian writer, which is good evidence of Rodó’s ignorance about Brazil. How could Rodó claim such cultural unity if he barely knew Brazilian literature and culture? The same question could be asked of Alfonso Reyes, the prominent Mexican Ambassador who spent many years

colonization in the Americas with the Portuguese colonial rule (especially the way both colonizers organized urban spaces in the Americas). Buarque uses the Spanish colonization as a counterpoint to underline the specificity and singularity of the Portuguese colonization in Brazil. As I mentioned earlier, one of the great merits of *Nossa* and *Nuestra América: Inter-American Dialogues* is to examine a remarkable and persisting pattern in Latin American intellectual life. Brazilian literary scholars are still trained in Brazil to compare their culture with Mother Europe, and, most of the time, they neglect their neighbors. Brazilian literature and culture are studied and taught in a very self-referential way at Brazilian universities. Thus a Brazilianist from Brazil who decides to teach and do research in the United States may find it somewhat strange that here it is taken for granted that Brazil is part of Latin America, and that in the U.S. universities Brazilian Studies is subsumed under Latin American Studies. *Nossa* and *Nuestra América* sheds light into this intricate and tense relationship.

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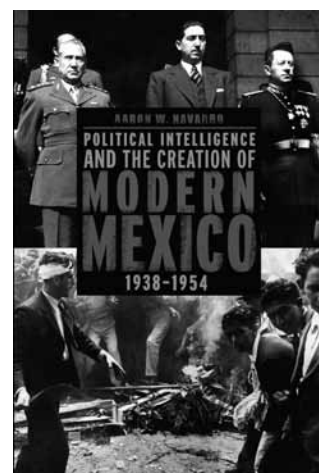
Generals, G-Men, and Mexico's Political Transformation

A REVIEW BY HALBERT JONES

Political Intelligence and the Creation of Modern Mexico, 1938-1954, By Aaron W. Navarro (*University Park: Pennsylvania State University Press, 2010, 301 pp.*)

In Mexico today, the armed forces and the intelligence service have taken up central roles in the government's fight against drug trafficking and organized crime, and the Institutional Revolutionary Party (PRI) is poised to retake the presidency, 12 years after its decades-long hold on the executive branch came to an end with the election of Vicente Fox in 2000. In this context, Aaron Navarro's study of mid-20th century Mexican politics is

Mexico joins a growing body of historical literature that adds muchneeded depth and nuance to the conventional narrative of what is still often referred to as the country's "contemporary" history, even though the events in question took place well over a half-century ago. Rather than describing the PRI as a monolithic political machine that effortlessly dominated Mexican politics from the time of the founding of its forerunner in 1929, Navarro relates how the party faced real challenges from opposition presidential candidates in the 1940, 1946 and 1952 elections. While the ruling party was successful in defeating Juan Andreu



country's political class underwent an important shift, with aging veterans of the Revolution being supplanted in key offices by a younger generation of officials with no military experience. Although the inauguration of President Miguel Alemán in 1946 has long been recognized as a watershed in the transition from military to civilian leadership, Navarro's study makes clear that the removal of the army from politics was in fact a gradual, delicate process, with the question of the political role of officers still unsettled into the early 1950s. Reforms to the structure of the PRI and an emphasis on professionalism in the armed forces played a part in bringing about this shift. Another key development was the rise of

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welcome—not just as a significant contribution to the historiography of the post-revolutionary period, but also as an insightful account of the development of institutions that continue to play an important part in Mexico's national life.

Political Intelligence and the Creation of Modern

Almazán and Joaquín Amaro (in 1940), Ezequiel Padilla (in 1946), and Miguel Henríquez Guzmán (in 1952), it was only after prevailing in the last of those contests that the regime perfected its control over the electoral process.

Through those same years, the composition of the

intelligence agencies, which provided an outlet for the energies of at least some ambitious military men. Drawing upon recently opened intelligence files, Navarro sheds light on the establishment, training and development of Mexico's internal security services as an arm of the state that contributed to the PRI's growing ability to monitor and control political activity around the country.

International conditions played an important part in shaping political and institutional outcomes in mid-century Mexico.

With a focus on electoral politics and institutional development at the national level, Navarro's conclusions present an interesting contrast with those of some other recent works on this period of Mexican history, which, along with much recent research on the Revolution, have examined the experience of particular localities, states and regions. Assessing the post-revolutionary period from a sub-national perspective, these studies have provided a valuable corrective to narratives that have overstated how much power was concentrated in Mexico City and in the hands of the president; how much *caciquismo* and the influence of military officers were curbed at the regional level; and how much resistance to the PRI regime died out during decades of authoritarian rule. *Political Intelligence*

and *the Creation of Modern Mexico* does not contradict these important findings. Indeed, by highlighting the electoral threats to the regime that surfaced through the 1940s and into the 1950s, Navarro is contributing in his own way to puncturing the myth of *priísta* omnipotence. Nonetheless, his work does serve as a useful reminder that even if local strongmen retained more influence than

equipment and training to both the army and the new intelligence agencies. In describing the influence of the United States on the culture of Mexico's internal security services, Navarro notes that early Mexican intelligence agents tended to adopt the style of dress of their U.S. colleagues and even, in a play on words, to call themselves *Jiménez*, which sounded like the Spanish pronunciation of "G-men."

Navarro also shows a sophisticated understanding of the indirect impact of external forces on Mexico. Accurately judging that the goal of maintaining stability on the southern border would best be served by limiting their involvement in Mexican politics, U.S. officials opted *not* to intervene in their neighbor's contentious elections during this period. With the strategies of some opposition candidates dependent to some extent on signs of goodwill—if not outright support—from Washington, this non-interventionist approach, while entirely correct in diplomatic terms, tended to favor the ruling party. And while PRI officials had their own reasons for seeking a firmer grip on the electoral process, it was significant that the marginalization of electoral opposition by the mid-1950s coincided with a change in the international atmosphere in Latin America brought about by the 1954 CIA-sponsored coup in Guatemala. Mexican leaders who wanted to avoid the fate of President Jacobo Arbenz deemed it important to refine and maintain a

political system that would deliver the order, stability and control of "subversive" elements implicitly demanded by the United States.

By providing an account of three key presidential elections, engaging productively with the literature on the demilitarization of Mexican politics, and presenting new information on the development of the country's intelligence apparatus, Navarro's book puts forward a cogent argument for the significance of the years between 1938 and 1954 as a period of consolidation for the *priísta* state. This study is a valuable contribution to the important work currently being done on a pivotal period in modern Mexican history. And with army units currently present on the streets of Mexican cities, the intelligence agency (now known as CISEN) heavily involved in the war on transnational criminal organizations, and the PRI reasserting itself as a leading political force, this is an unusually timely piece of historical scholarship.

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MAKING A DIFFERENCE

A Problem with the UN Millennium Goals

A Sixth-Grade Diploma Is No Longer Enough BY MARGARET MORGANROTH GULLETTE

EVERY SATURDAY FOR TWO YEARS, Estevana Sanchez walked through the jungle for miles, in the dark, crossing a river in the rainy season, to finish high school. Her five teenage children did the same. At the end of the trail, they took a long bus ride to the town of San Juan del Sur, Nicaragua, in time for the 7:30 AM start of classes. Over the past ten years, 419 students, including six Sanchezes, graduated from the Free High School for Adults.

On graduating, Estevana worked for the Ministry of Education in the adult literacy program. San Juan was declared “Free of Illiteracy” in 2008. Now Estevana works in the battered women’s shelter, a well-educated presence in the lives of troubled girls.

The vice-minister of Education says the FHS is “a model” for the country: We unleash creative energies and abilities now wasted because the Monday-to-Friday high schools exclude so many—everyone over 18, pregnant girls, women with children, and people who work weekdays.

We teach these talented people, hungry for education, all the government-required subjects, plus computer skills, critical thinking, women’s rights, family planning, self-esteem. Our diploma opens the door to economic opportunity, teaches the values of community outreach, protects women

from intra-familial violence, and helps produce the valuable workers, active citizens, and socially-minded leaders that this small country desperately needs. Our school is changing the culture of the region.

Our graduates are grateful. A 34-year-old welder, Luis Sevilla, says his education helped him speak Spanish better and write better job proposals. The highest-scoring student in our Tourism program, Belkys Guillen, 27, says the school’s tradition of activism encouraged her when she organized a women’s cooperative to sell high-end fruit jams. Almost 90% of our graduates work; some achieve higher ed. One alumna, now a university graduate, has returned to teach in the Saturday School. You can learn more of their stories at <http://youtu.be/x4urC2Ypq2g>

Our programs include classes offered in 10 villages, reaching out to 150 students, many of them subsistence farmers. Our Technical High School enrolled a record number of students this year: 267, up from 110 last year. We have grown 39%, to a total of 742. We had to add an extra career track to our technical programs.

We do all this at remarkably low cost. A mere \$98 gives a student a year of valuable education because of dedicated teachers and rent-free school buildings. (In fact, we need our own building. A Harvard



Photo caption: *Dustinci as vendae verum consequaspel int que volec*

Public Health student, Deepa Panchang, introduced us to Engineers without Borders, Boston.)

Unfortunately, the Ministry that loves us has no money for us—no texts, no salaries. Like other developing nations, Nicaragua is struggling to fulfill the basic U.N. Millennium Goal: a mere sixth-grade diploma. But, as Luis, the welder says, “You can’t get along without a high-school degree here any more.”

In the developing world, secondary education is crucial, especially for women. (74% of this year’s students are women.) The world cannot afford to educate just children, and only up to sixth grade. We can’t afford to waste the abilities of people over eighteen and of women with children, and still have the educated populace that is needed—for democracy, for productivity, for personal fulfillment—in the 21st century.

Lacking government support, and to continue charging students nothing, the FHS must rely on private donations. But little corporate or foundation funding goes toward secondary education abroad. The Millennium program, a crash course toward raising capabilities around the globe, falls distressingly short in this respect. I feel the tension personally because in 2002 I co-founded the FHS with my wonderful Nicaraguan colleague, Dr. Rosa Elena Bello. I used my Harvard writing skills to write the first appeals. Together, we fund-raise to keep it going. Our students’ hopes and successes are what keep us going.

Margaret Morganroth Gullette, (B.A. 1962, Ph.D. 1975, Radcliffe Institute 1987) visits San Juan del Sur annually to monitor the FHS. A resident scholar at the Women’s Studies Research

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VISITING SCHOLARS AND FELLOWS PROGRAM



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David Rockefeller Center for Latin American Studies


HARVARD UNIVERSITY

THE LAST WORD BY JANE JAQUETTE

More than twice as many Latin Americans are attending institutions of higher education than two decades ago, and the number will continue to increase as more students graduate from secondary schools. *ReVista's* timely focus on higher education is thought-provoking. These essays highlight three points of contention: What is higher education for? How should higher educational institutions be managed? And, what should be the balance between public and private institutions? How these issues are addressed will shape the structure and quality of higher education in Latin America in the 21st century.

On the goals of education, most of these essays assume that universities must help improve Latin American economic competitiveness and create a culture of innovation. Latin American students are weak in math and sciences; only a fourth of Latin American undergraduates take degrees in science or engineering. Fernando Reimers calls for universities to contribute to the “innovation ecosystem that Latin America needs in order to find a niche in a highly inter-dependent global economy.” Ned Strong shows how a professor’s scientific interest in post-harvest processing helped Chile become an exporter of perishable fruits. César Peña Viga sees students, in a very broad sense, as “entrepreneurs in training.” Passionately disagreeing, Jaime Pensado, invoking Rodó’s *Ariel*, sees student protests today rejecting the “neoliberal project” of privatizations that increase tuitions but do little, in his view, to improve educational quality.

The debate over goals spills over into the controversy about university management. Noting that the region’s public universities historically claimed “a degree of autonomy not found anywhere else in the world,” Andrés Bernasconi argues that the relationship between universities and the state is changing rapidly with the model of the “entrepreneurial university in a knowledge economy.” But, he warns, universities are not like corporations, as “stellar faculty, state-of-the-art laboratories, and enriching educational environments cost beyond what most profitable rates of return would bear.” Liz Reisberg and Iván Pacheco examine the spread of accreditation efforts as budget constraints force governments to demand accountability. As standards become increasingly internationalized, the need for improvements in quality becomes undeniable: as Carlos Angulo-Galvis observes, only two Latin American universities rank among the top 200 worldwide.

Management changes often meet with strong resistance from students and faculty. Ricardo Reich discusses successful initiatives in Chile  while Peter De Shazo and Angélica Natera summarize what has been learned from initiatives to promote teaching and learning. All agree that a key factor is faculty support for change, and that this can be nurtured if changes do not undermine professors’ professional standing with peers and if support is provided for the social sciences and humanities as well as science and technology. Performance incentives do not always work, particularly if faculty members feel that they are being badly underpaid.

Moisés Wasserman, former rector of the National University of Colombia, makes the case against privatization: higher education should be “a universal right” not a “commercial good.” The debate over privatization is fundamentally not about principle, however, but about quality and access. Wasserman uses the U.S. crackdown on for-profit schools to argue against allowing for-profit higher education in Colombia, but Claudio de Moura Castro, Aldo Giutini and Luciana Lima argue that there is actually very little difference in quality between public and private institutions. Using Brazil’s “strenuous exit test,” they show that, although public institutions are far more expensive to maintain, they produce academic results that are only slightly superior; further, for-profit and non-profit universities are just about equal in the quality of their graduates. Tuition-free public universities give the wealthy privileged access to what Naomar Almeida-Filho describes as “a very scarce and valuable social asset.” The growth of private and for-profit institutions is a clear sign of how limited that access is. Ironically, making education a commodity has in fact made it more universal. Nor is it surprising that high school students, not those already in university, are the ones protesting, as Peter Siavelis documents.

As these essays show, there are many initiatives underway that hold real promise. The final word should go to Felipe Portocarrero, who emphasizes the broader ways in which higher education deepens citizenship, and that citizenship requires “imagination, creativity, a sense of responsibility and a vocation for service.” Without a commitment to citizenship, higher education cannot perform its many functions or fulfill its promise.

Jane S. Jaquette is Professor Emeritus of Politics at Occidental College, where she continues to teach. Her most recent book is Feminist Agendas and Democracy in Latin America; she is writing a book on power and citizenship in Machiavelli and Hobbes.



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WITH FEATURED PHOTOGRAPHY BY: **Steve Cagan**

HIGHER EDUCATION PERU AND BEYOND

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STUDENT CENTERED UNIVERSITY LEARNING

contributions to the diffusion of Peer Instruction in Latin America and to the development of this article: Angélica Natera, Cassandre Alvarado and Kate Koehler.

IN THE EYE OF THE BEHOLDER

agencies and universities on strategies for improving higher education. Her research areas include quality assurance, internationalization, and the challenges of providing equitable access to higher education. Most of her work has focused on Latin America.

Ivan Pacheco is a research associate at the Center for International Higher Education in Boston College and he is coauthor and coeditor of two studies on academic salaries worldwide. Pacheco was formerly the Director of Quality Assurance for Higher Education at the Colombian Ministry of Education.

BUILDING KNOWLEDGE ECONOMIS IN CENTRAL AMERICA

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MAKING A DIFFERENCE

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