

and 390 made short-term visits. During that period, only 56 faculty members returned.

Unfortunately, universities in Mongolia are not fully aware of the challenges of globalization and a greater role of internationalization. Not only small private colleges but also the largest research universities are struggling to develop a strategic plan for internationalization and to allocate necessary resources. Institutional human capacities to handle internationalization strategies are scarce and weak, and in most cases the university administration drives the process. International activities focus on short-term objectives and are funded on crisis basis. A response to internationalization differs from college to college within the university campus. Some faculty members perceive internationalization as going abroad and others are psychologically unprepared for change.

The country is facing a growing outflow of young scholars and a smaller number of returnees from countries like Japan, the United States, and Germany.

IMPACT OF BRAIN DRAIN

Foreign-educated scholars are the source for global positioning of Mongolian science and education. They are, too, internationally sought for research and development (R&D) positions. It is noteworthy to say that R&D is flowing from country to country with scientists who generated that knowledge and through information technology and transnational companies making multiple passages worldwide and settling down wherever they find growth of demand or profit. The process has been reinforced with the World Trade Organization and economic growth in Asian countries, which are increasingly becoming able to afford not only ready products and technology but also to attract highly qualified professionals.

Having trained their faculty and students overseas, Mongolian universities hope to contribute to the future growth of the country and enhance their presence in global academic circles. However, when this critical mass of trained scholars stays in host countries, institutions are not rewarded with ability to integrate into the world scientific community and the sizable economic gains that could be possible through technology and product innovation. As a consequence, brain drain reverses the expectation of universities for a "stronger organization through better people" into constant lack of management, teaching, and research personnel. And, the goal of becoming a "top world university" turns into a remote vision.

To reverse the outflow of scholars, better working conditions, rewarding salaries and promising careers must be offered for highly skilled people. However, while competing needs within society do not allow the government to invest in

R&D (presently, 0.3 percent of GDP) and the country's businesses have not achieved a level that empowers them to invest in research and philanthropy, the country's spending on science and higher education will hardly increase. Universities, too, being dependent on tuition fees, are not able to offer conditions comparable to the international level.

WHAT SHOULD BE DONE?

Collaboratively, international development organizations, government, and national higher education institutions must take actions to maximize benefits of globalization. The World Bank, the Asian Development Bank, and other foundations should broaden programs encouraging the establishment of international and regional professional associations and networks in developing countries and programs nurturing joint research with comparative and international perspectives. These programs will help scholars maintain contacts with their colleagues, contribute to the global dimension of scientific issues, and have positive effects on R&D innovation in developing countries. Financing of infrastructure development and laboratory renovation must be a part of the programs.

When local funding and foreign aid are scarce, the Mongolian government should seek possibilities for cost sharing between the government, international agencies, and universities. Institutional strengthening could be achieved by identifying key areas of development and exploring university initiatives for internationalization. The current interuniversity collaboration and exchange as well as dual, sandwich, and off-shore programs have shown sufficient credibility in terms of cost-efficiency and effective outcome. Support for these innovations will reverse the image of Mongolian "low-quality" education to internationally "matching quality" education. ■

A Latin American Private University Strives To Become "World Class"

PEDRO ROSSO AND NICOLÁS VELASCO

Pedro Rosso is the rector of Pontificia Universidad Católica de Chile, Santiago, Chile. E-mail: rectoria@puc.cl. Nicolás Velasco, former vice-rector for academic affairs, currently heads an ad hoc committee on long-term planning at the same university.

Latin American countries are facing the challenges of social and economic development in an international context

where competitiveness increasingly depends on the capacity to create knowledge. Research universities should be key players in this scenario. Unfortunately, the region has few research universities, and most of them are large public institutions plagued by problems such as insufficient funding, poor management, and political feuds. Private research universities are even fewer in number, and only Pontificia Universidad Católica de Chile (UC) has achieved some degree of international recognition. Founded in 1888 in Santiago, the country's capital, UC is the premier private university in Chile, and currently it is pursuing the ambitious goal of becoming a world-class university by 2038, the year of its 150th anniversary. This effort is motivated by the conviction that in a small developing country with great potential, such as Chile, a world-class university can make a big difference.

THE CHALLENGE

How realistic is UC's long-term goal? One of UC's main assets is a history of good governance, stable policies, and a culture of quality and innovation that has fostered successive organizational and curricular changes. UC has also shown the capacity to excel in some areas. For example, last year it was ranked 48th in the world in the arts and humanities by the *Times Higher Education Supplement* 2005 world ranking of universities. Certainly a gratifying accomplishment, but UC still has a long way to go in other areas—primarily in science, technology, and graduate education. Nevertheless, it is making encouraging advances. Presently UC is ranked 6th in the Latin American institutional rankings based on ISI Essential Science Indicators. Considering that Latin America contributes less than 2 percent of the world's scientific papers, this is not such a great achievement by international standards, although it does reflect UC's efforts in this area and its growth potential. In its pursuit of excellence UC is not inventing any new strategies but only trying to perform as well as possible in the traditional areas of academic development. This includes recruiting the best faculty and attracting top students, improving the educational programs, promoting research, creating ties with industry, and trying to increase and diversify its revenues. Furthermore, with the purpose of monitoring the progress of its long-term project, a set of key indicators, including student/teacher ratios, number of citations per paper, percentage of foreign students, “market value” of the graduates, and others will periodically be assessed.

ACADEMIC STAFF AND STUDENTS

Over the last 20 years UC has invested very heavily in faculty development, sending most of the young faculty to graduate programs at leading US and European universities. As a result of this policy, nearly 90 percent of its academic staff have received either graduate degrees or, in the case of the Medical School, doctoral training abroad. Although this figure is very good by regional standards, it leaves much room for improve-

ment. Besides quality, the main challenge facing UC is to double the size of its full-time academic staff, currently 1,066 strong. This is a costly and much-needed effort, since in many areas UC lacks faculty depth and the current academic load of the average teacher is counterproductive to research output.

UC has been very successful in attracting top students. This year 55 percent of high school graduates obtaining the highest scores on the National University Entrance Test were admitted to UC. In a country with 63 public and private universities this is an amazing accomplishment. Since quality attracts quality, the presence of outstanding teachers and students represents a great asset for the present and the future. In line with this idea, UC only admits foreign-exchange students who are performing in the upper 30 percent of their classes. Last year over 1,000 undergraduate students from top US and European universities met this requirement and spent up to two semesters at UC.

This includes recruiting the best faculty and attracting top students, improving the educational programs, promoting research, creating ties with industry, and trying to increase and diversify its revenues.

A NEW EDUCATIONAL APPROACH

UC is undergoing a major curricular change aimed at providing the students with a more flexible, comprehensive, and pertinent educational experience. Changes include a new area of general studies, a compulsory English-language requirement, a written Spanish-language requirement, and community service learning opportunities. Students also have a wide range of extracurricular activities to choose from, including missionary work, community affairs, sports, and the arts. In addition, faculties are being trained in the use of novel pedagogical approaches and a “state of the art” center for the use of information technology educational tools is under construction.

With the purpose of testing the quality of its educational programs, UC has asked accrediting entities from the United States and the United Kingdom to review its undergraduate programs. So far, the Schools of Journalism, Architecture, Medicine, and Engineering have successfully met this challenge.

STRENGTHENING RESEARCH CAPACITY AND GRADUATE PROGRAMS

Strengthening research capacity represents one of UC's greatest challenges. Chile lacks scientific tradition, public investment is only 0.6 percent of GNP, and there is little support for research coming from the private sector. However, all this could undergo a substantial change for the better thanks to impending legislation that will funnel new tax revenues in the

science and technology fields. Concerned by the limited capacity of the Chilean industry to innovate, the government is promoting the creation of joint research programs between universities and industry while increasing support for basic science. This promising new environment could greatly benefit UC by making additional funds available to recruit new faculty with research potential and to improve laboratories and other facilities.

Another crucial goal for UC is to expand and to improve the quality of its graduate programs. Chile urgently needs more PhDs. Compared with Brazil, Mexico, or Argentina, the number of doctoral degrees granted annually by Chilean universities is dismal. For example, in 2004 only 240 PhD degrees were granted throughout the entire country. For this reason, over the last five years UC has made the creation of new doctoral programs a top priority, expanding the number of doctoral students from 270 to 550. For the first time, in 2004, UC granted more than 50 PhD degrees, a number that is likely to increase again in the present year. Ideally, UC would like to graduate over 200 students per year from its doctoral programs by 2015.

REVENUES AND FUNDING

The effort to become a world-class university is expensive. UC is not a rich university and it is located in a country with a per capita GNP below US\$7,000. Despite these handicaps, funding should not be an insurmountable obstacle. This year its "consolidated" budget, including the various businesses and investments controlled by the university, amounted to US\$500 million. This is a rather modest quantity compared with the budget of most US research universities, but it should increase substantially in the future. The Chilean economy has been growing at a healthy pace for nearly two decades, and the prospects for the future are good. Universities have greatly benefited from this positive economic development. Thanks to higher tuition fees, greater government subsidies, and a substantial increase in the government's ability to supply competitive grants, UC has doubled its revenues in less than one decade.

UC's endowment is still minute compared to that of US private research universities. Currently valued at approximately US\$200 million, including the assets of a TV network owned and operated by the university, this endowment would have to grow considerably to generate a significant quantity of additional revenues. Presently, many of UC's assets, which are mostly tied up in unproductive real estate, are being reinvested for that purpose.

CONCLUSION

Transforming a private research university located in Latin America into a world-class university is a challenging but fascinating task. Regardless of the final outcome, the year 2038 should find UC in a much-better standing than what its normal pace of development would have enabled it to achieve.

UC's effort is taking place in the best context that a Latin American country presently can offer to a research university. Chile is becoming an island of social and economic progress in a region rocked by tension generated by the lackluster performance of its political leadership and disenchantment over inequitable economic reforms. The Chilean dream of reaching a more advanced stage of development has never been so close to realization, and a research university such as UC could be instrumental to help to make that dream come true. ■

The Gray Zones of Higher Education in the United States

JOSHUA WOODS

Joshua Woods is a doctoral student in the Department of Sociology, Michigan State University. Address: Department of Sociology, Michigan State University, 316 Berkey Hall, East Lansing, MI 48824 USA. E-mail: woodsjos@msu.edu.

In any society, there are many types of morally questionable behavior that are not prohibited by law. At the margins of almost all major institutions lie "gray zones"—that is, areas where the moral quality of certain behaviors and practices are ambiguous. There is an important interaction between the individual stakeholders in gray zones, the quality of the given institution and all those who come into contact with it. The stakeholders of gray zones usually try to avoid confrontations with opposing parties but are always interested in normalizing or legitimizing their values, operations, and individual actions. Gray zones often change when they become contested. In some cases, the ambiguous behavior becomes legalized and, in other cases, outlawed. In almost all cases, the outcomes of these contests have an important impact on the broader society.

INVESTIGATIONS INTO FOR-PROFIT EDUCATION

One gray zone in the United States that has been increasingly contested by students, politicians, and journalists in recent years can be found in the for-profit education industry. Since the late 1990s, several postsecondary education companies have enjoyed enormous growth. With riches, however, came scrutiny. In the last few years, many of the schools owned by these companies have faced lawsuits and federal investigations. In September 2004, the Apollo group, which runs the University of Phoenix, paid out \$9.8 million to the Department of Education to settle claims of recruitment violations. In a recent *60 Minutes* exposé, graduates of a college