Overall, those who stayed in the United States tended to be younger and less likely to be married with dependents upon completion of their Ph.D.s. Gender played a role in biochemistry and mathematics, with the women being relatively more likely to stay in the United States than to return. Fewer than 20 percent of the women with Ph.D.s in mathematics left; almost 50 percent of the women who stayed were mathematicians. Conversely, the women with degrees in English were much more likely to leave than to stay. Two-thirds of the women with Ph.D.s in English left, and more than a third of all the female Ph.D. recipients from abroad who returned home were in the field of English. The men exhibited the opposite behavior (compared to the women). Slightly more than 50 percent of the men with Ph.D.s in mathematics left, as opposed to 25 percent of the electrical engineers.

The "principal source of doctoral funding" emerged as another crucial factor distinguishing these two groups. More than a quarter of those who returned home had been funded through sources such as their national governments or their employers. Conversely, as much as 90 percent of those who stayed had financed their education primarily by working as teachers and research assistants.

Finally, the two groups stated opposing career goals at the time of Ph.D. completion. The returnees in biochemistry, computer science, and electrical engineering were much more likely to indicate an interest in academic employment than those who stayed in the United States. Conversely, in fields where the primary career of choice among Ph.D.s was overwhelmingly an academic job—namely, English, mathematics, or political science—those who stayed were much more likely to indicate a preference for an academic career, compared to those who returned home.

The "principal source of doctoral funding" emerged as another crucial factor distinguishing these two groups.

The thinking behind the decision to stay or to return was echoed in the reasons listed by the respondents as the most important factors in choosing their first jobs. Comparing those Ph.D. recipients whose first jobs were outside the United States with those whose first jobs were in the United States, there were important differences in motivations. Equally important to both groups were these key considerations: "use of my doctoral education," "work that interests/challenges me," or "great opportunity to do research." However, those in computer

science, electrical engineering, and mathematics who left the United States were less likely, as compared to those who stayed behind, to list considerations such as salary, career ambitions, or organizational prestige. The Ph.D. holders from abroad who left or were leaving the United States were also less likely, irrespective of discipline, to indicate that they chose their first jobs because of a "limited job market" or because it was the "only job offered." Finally, in a telling clue as to why some of the Ph.D. recipients went back home, those working abroad were typically much more likely than those who stayed to point to "proximity to parents, relatives, or friends" or "contribution to society" as important considerations influencing their first job choices. This held true for all fields. Clearly, these nonpecuniary considerations, while not necessarily relevant to the particular jobs they chose, were very important considerations in their decisions to return home.

# Venezuelan Higher Education: The Trend toward State Control

### **Orlando Albornoz**

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enezuela has a well-developed higher education system that was characterized by expansion during the period from 1945 to the end of the century. This growth went from almost zero to what many believe is excess capacity, capturing most of the country's education budget and leaving the basic and secondary levels of education underfunded. The system grew mostly in terms of traditional indicators like the number of institutions, students, and degree recipients. Missing was expansion in the area of science and technology. That is to say, the system was successful from the perspective of training institutions but not in the direction of sustaining the needs of knowledge-generating institutions. This low level of knowledge production explains why Venezuela has never been a regional pacesetter like Argentina, Brazil, or Mexico but has only been a decent follower, like Chile, Peru, or Colombia.

The government that came to power in 1998 brought along a new vision for higher education, although not new in innovative terms—quite the contrary. The system had been developing in the direction of decentralization. The new government, however, is trying to centralize the system along the lines of the only state-controlled

system of higher education in Latin America and the Caribbean—that is, the system in Cuba, where the state rules the country's institutions, including all of higher education.

#### An Overview

The Venezuelan higher education system follows a typical diversified pattern. Until 1953, the system was rather small and centralized. In that year the private sector, through the influence of American oil companies as well as in response to local demand, opened up with the creation of the first two private universities. In 1958 with the advent of democracy, after 10 years of military rule, the state higher education system expanded and developed, although not without encountering many problems. The guerrilla movement of the 1960s emerged from the large public universities. In the early 1970s the government intervened, implementing a number of university reforms.

The higher education system is divided into universities and nonuniversities. The latter include *colegios* and *institutos universitarios*, which are institutions with three-year academic programs. Universities are professional institutions and most of them offer graduate studies and currently account for almost all academic research conducted in the country. In fact, a limited number of them, the so-called autonomous universities and the Venezuelan Institute of Scientific Research, carry out most of the science and technology research. Law, education, business administration, and the social sciences constitute the fields of most interest to students.

The private sector of Venezuelan higher education is quite strong and includes several types of institutions.

The private sector of Venezuelan higher education is quite strong and includes several types of institutions. While some are dedicated to three-year programs, others are regular universities with five-year degree programs. Although a number of institutions have ended up as simple business entities, others are quite committed to entering the academic sphere. However, so far no private institution in the country can compete with the major public universities in knowledge production. Private institutions strictly conform to the teaching model, with research, as stated, restricted to the large public institutions. The universities run by the state are divided into the old traditional universities created in the 19th and early 20th centuries and the *universidades experimentales*, created after 1958. The present

government controls these latter universities through the appointment of new authorities. The government has not interfered in the rest of the system—the autonomous public universities and the private institutions.

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#### Obstacles to Modernization

Many Venezuelans believe that the current government's intervention in the higher education system constitutes a setback, even though everyone agrees that the system needs an overhaul. Funds are being squandered because of the privileges granted to many professors. In fact, professors are paid according to the national job classification system. Many very clever academic entrepreneurs use their positions at universities to further their own personal interests. The new government has not touched these privileges and is unlikely ever to do so. To the contrary, it has increased salaries and privileges and is not exercising power to bring about academic change, appearing only interested in changes in the ideological arena. The government has created a Ministry of Higher Education. The top authorities at five of the experimental universities are appointed by the government, which is pressing to bring the whole higher education system under state control. However, the government has as yet said nothing about the private sector.

It must be noted that, in more than one way, President Hugo Chávez is a very peculiar leader, though perhaps he just belongs to the long line of Latin American autocrats. Even though he first tried to come to power in 1992 via a coup d'état, he returned in 1998 as a democratically elected leader. He then immediately broke with the political tradition of Venezuelan democracy, imposing his own vision. At the end of 2002, he was very much under attack. Old political forces have come back and the country is polarized. Unfortunately, the higher education system finds itself in the middle of this struggle. Venezuela might be an example of how political events can guide the course of higher learning. Chávez's government is anti-intellectual, antielite, antitechnology, antiinternationalization, and of course antiglobalization. By trying to change the ideological and political base of society while not getting involved in the technicalities of educational reform, the Chávez

government may dismantle Venezuelan higher education without providing opportunities for the necessary modernization of the whole education system. If current trends continue, Venezuela's complex and diverse higher education system may come to resemble the centralized Cuban system.

#### The Immediate Future

Chávez, who sees himself as a kind of reincarnation of Simon Bolivar and clone of Fidel Castro, his political mentor, seems to have embraced the idea of being the leader of a world revolution against capitalism. In October 2002, Chávez declared his vision for Venezuelan education in a speech before the young members of the Federación Bolivariana de Estudiantes in a Caracas theater: "No classroom in Venezuela should be without a Bolivarian student brigade."

Many people would argue with the current government's approach to higher education. But time will tell if Chávez is right. In the meantime it will be quite interesting to watch the Venezuelan higher education system going backward, from decentralization to centralized control, from diversity to homogeneity, from political and ideological pluralism to the one-dimensional fundamentalism of an indoctrination-based approach to education and, in fact, to the whole social and political system.

# Compromising the Charter between Higher Education and Society

## **Adrienna Kezar**

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Over the last two decades, various social critics and leaders worldwide have noted a disturbing trend in higher education: the collective or public good, historically an important component of the charter between higher education and society, is being compromised. According to critics, higher education is forgoing its role as a social institution and is functioning increasingly as an industry with fluctuating, predominantly economic goals and market-oriented values. Increasingly, the production of workers is the primary goal. Publicly funded colleges and universities are now encouraged to privatize selected activities, becoming for-profit entities with economic engines and with private and economic as opposed to public and social goals. This shift has been called the industrial or entrepreneurial model.

Critics are concerned that the current charter encourages ethical and educational compromises that are potentially harmful to higher education and the general public, especially as it relates to the historic mission of fostering democracy and important values such as equality, academic freedom, or the pursuit of knowledge. Social commentators note that this orientation to the market and economic goals is a worldwide phenomenon and even more prevalent within developing countries where economic advancement has become the cornerstone of political and educational agendas.

## Cause for Concern

Although the aims of higher education have shifted over time, critics worry that this dramatic alteration is taking place seemingly without dialogue or awareness among the major constituent groups. Why does a discussion of the charter between higher education and society matter? Because the social charter is the foundation of higher education institutions' missions and values and it affects choices made by all individuals in the system of higher education from policymakers to parents to faculty to students. For example, if policymakers and the general public are not clear about why investment in higher education matters and do not appreciate the social and public benefits, other public policy priorities may end up gaining more support than higher education.

### Empirical Evidence

Recently I conducted a meta-analysis of the research on these trends toward privatization and commercialization (industrial model) to examine the broad claims by social critics. In short, the evidence does support claims that some sectors of higher education in the United States have become industrialized, particularly research and comprehensive institutions and institutions with Division I athletic teams.

Studies document that corporate language and practices have replaced traditional academic administration in which educational values such as truth, equity, autonomy, and mission are central to decision making. This shift in language and values has translated into many new approaches such as outsourcing, restructuring, and responsibility-centered budgeting. Research privatization is growing yearly at exponential levels. Several scholars have traced the increasing vocationalization of the curriculum and disenfranchisement of faculty, as evidenced by the declining number of full-time and tenure-track lines and growing numbers of part-time and contract faculty.