

## **Higher education in Mexico: From unregulated expansion to evaluation**

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**Abstract.** This paper deals with changes in Mexican higher education over the past 20 years, with particular reference to modifications in policy underway since the late 1980s. There is a general overview of the structure of the Mexican system and the basic changes that occurred during the expansionary period of the 1970s: unplanned growth in public universities which quickly became large, unwieldy organizations; the rapid expansion of the academic profession; heavy influence of politicization in public institutions, which diluted many of the traditional forms of academic organization; and an expansionist and undemanding government funding policy which was basically geared to giving access to growing student demand. The 1980s were a period of economic crisis which translated into restricted public funding for higher education and a government stance of benign neglect. However, during the past four years a new policy has been formulated which has channelled more funds toward the sector in a context of new demands: evaluation of institutional and individual performance, closer links with the productive sector, diversification of funding (mainly through higher student fees), and differential salary scales for academics among other things. The paper concludes with some remarks on emerging processes and various unresolved issues in a context where two rationales seem to be at odds within the system: the traditional *modus operandi* of institutions where assessment has always been lacking, and the new government policy which demands quality and accountability from higher education.

It is commonplace to read that higher education systems in most countries have experienced important changes in the eighties and early nineties, and Mexico does not seem to be an exception to this almost trivial assertion. The question of change in higher education systems and its relation to public policy is nevertheless a complex one (Clark 1983) which can be examined here only in the broadest terms. What changes have occurred in the recent past and to what extent is Mexican higher education being moulded by a new government policy for the 1990s?

A brief overview of the structure and the recent trends in Mexican higher education is in order. The institutions from which contemporary higher education developed in Mexico are the public universities with the massive National Autonomous University of Mexico (UNAM) in Mexico City establishing the model for the rest of the public universities in each state capital. These institutions, which have developed over the past fifty years, are for the most part legally autonomous, and they make their own decisions with regard to personnel, curriculum and research, although they are supported by public funds. With few exceptions Mexican public universities follow a rather rigid, traditional mode or organization. Most of them are basically teaching institutions, since research is highly developed in the capital but only feebly so in the provinces. Those universities that do have important research facilities – organized around Institutes – tend to separate them

from teaching, which is organized around Faculties. Each Faculty usually trains students in a single profession or discipline. Public universities have another very singular trait: many of them have upper secondary or preparatory schools attached to them, a holdover from the times when the federal government was centrally concerned with primary schooling and universities took charge early on of the middle echelons of the schooling system. Furthermore, as part of a long standing 'open door' policy, very few public universities examine applicants and there is no national entrance examination.

Over the past thirty years government policy has developed another sector of higher education, the technological institutes. These are small institutions basically devoted to training engineers and business administrators. They are centrally controlled by a department of the federal government which makes decisions on everything from curriculum to personnel. On the national average, technological institutes cover only about 15% of student enrolment, but their presence is very important in certain regions where other options such as public or private universities have not developed.

Private higher education has grown rapidly over the past twenty years. Although its forms of academic organization and the quality of its course offerings cover a wide range, it can be said that basically two sectors or types of private institution seem to have taken hold. The first is made up of the *élite* private universities that offer an ample array of academic programs, that are staffed by well-trained and full-time academics, and that are moving into research. The vast majority of private institutions, however, is made up of small schools that offer two or three training programs in accounting, business or psychology. Their teaching staff is poorly trained and mostly hired on an hourly basis, research is nonexistent, and admissions policy is unselective. State regulation in this sector has been rather feeble: up to the present, state intervention in the workings of private higher education has been limited to the act of granting official licenses to private institutions at the time of their creation, but no further regulation as to the quality or type of academic offerings has been developed by public policymakers.

Higher education has expanded very rapidly since 1970 (see Table 1). Two decades ago, tertiary education in Mexico was highly concentrated in very few large public universities in the nation's capital and two other large cities; its basic course offerings were the traditional professions (medicine, law and engineering);

Table 1. Two decades of expansion in higher education

	1970	1980	1990
Public universities	144,629	536,991	723,420
Technological institutions	38,721	92,567	160,698
Elite private institutions	16,987	71,001	121,305
Other private institutions	11,228	26,303	65,819
Other public institutions	1,316	4,429	6,949
Total enrolment	212,881	731,291	1,078,191

Source: National Association of Higher Education Institutions.

its public was made up of middle and upper class males; and research was an extremely marginal activity.

By 1990 around 15% of young people between the ages of 20 and 24 were enrolled in some type of higher education program, and about 40% of these students were women. However, it seems evident at this point that the high growth rates of the seventies have reached their limit: the average annual rate since 1985 has been 2.3%, whereas in the late seventies enrolments grew at an annual rate of 15%. One interesting aspect of these demographic changes is that the women are keeping enrolment rates alive in most institutions (especially the private ones): the male population has grown annually at only 0.6% in the last five years, while female enrolments continue to grow at a rate of 5.4%.

Scientific research is now carried out in various institutions all over the country, although real decentralization has been difficult to achieve in this area. Most of the research activity is carried out in the six largest public universities located in three urban centers. At the postgraduate level there is a national enrolment of about 45,000 students out of a total of more than one million, and only several hundred of these postgraduate students are enrolled in doctoral programs.

Rapid unplanned growth accompanied by regional and social disparities seem to be the rule in the case of the expansion of the new academic profession. In 1970 around 24,000 professors taught in universities, and most of them were practising professionals who were hired on a part-time basis to teach several hours a week at their local institution. Doctorates were not a requirement for entry into the teaching profession (if it could be said to have existed as such at that time) and research was carried out by a very small number of people at three or four large institutions. However, over the following two decades an additional 75,000 people were hired as professors in order to meet the needs of a rapidly expanding student population. This enormous expansion of the academic profession occurred in the absence of a diverse and efficient system of postgraduate studies that would have been needed to meet this demand with a reasonable level of academic quality. Expansive student demand arrived at a moment when the academic system had not fully developed its own reproductive mechanisms. Thus, the academic profession as it exists today was formed on the basis of massive non-competitive hiring of young people with little postgraduate training to academic positions which are for the most part teaching jobs. Even today only about 6,000 out of the national total of 100,000 professors are highly qualified researchers (CONACYT 1991). At the less developed provincial institutions there are numerous under-professionalized teachers with few opportunities for promotion or postgraduate studies. This segmentation in the academic profession makes for low mobility among disciplines and institutions as well as for rather localist academic cultures whose intellectual outlooks are limited by geographical and disciplinary isolation (Casillas *et al.* 1989; Kent 1991).

Some brief comments must be made on the political and institutional context in which this expansion took place during the seventies and part of the eighties. Many public universities made the rough passage from the traditional, academically undifferentiated, structures of the sixties to the massive, politically dynamic, bureaucracies of the eighties in a climate of politicization, whether as a result of

student movements seeking open admissions and democratic rule or as a result of the new unionism pressing against authoritarianism in hiring procedures (and, in passing, against meritocratic selection criteria as well). Traditional forms of personal rulership in universities were swept away and new forms of bureaucratic and political coordination took their place. In general, collegial governance based on merit has to fight it out with the dominant bureaucratic and political forms of authority. Hence, many Mexican institutions of higher education cannot be called 'bottom-heavy organizations' (Clark 1983) since the real weight of administration, resource distribution and academic decision making has shifted to the middle and upper levels of authority within each establishment: administrators, not academics, are the central wielders of institutional power in a context of political push-and-shove with other organized sectors such as unions or student organizations (Brunner 1990; Kent 1990).

### **State policy toward higher education in the 70s and 80s**

One general conclusion to be drawn from the foregoing remarks is that a good number of the changes over the past two decades have been the result of the way public universities have responded, without much institutional planning or heavy government steering, to the intense social demand for higher education. Basically, two general types of policy were responsible for the manner in which this expansion occurred: a general consensus for non-selective entry to higher education and continued financial support from the state between 1970 and 1982. As was pointed out above, the higher education system responded to the long demand cycle of the 1970s by literally opening its doors. Since neither government policy nor the universities themselves created an examination system or any other selection mechanism, regulation of student enrolments was left to the expansion rates of the lower echelons of the schooling system where selection occurs more for social or economic reasons than for academic reasons.<sup>1</sup>

The second important aspect of this expansionary process was state funding policy. There was generous support for public higher education throughout the prosperous 1970s, especially toward the end of that decade when government leaders mistakenly thought the high prices for oil and the low interest rates for capital on the international market would not vary in many years. Thus a steady stream of government funds financed the high growth rates of student enrolment in the seventies.

The state's position toward funding in higher education was as much part of an educational policy as of a global social and political policy. In an implicit and unformalized but quite real sense, a relationship of political exchange (Kogan 1987) seems to have developed between the state and middle income groups who place great store in higher education as a means of social mobility. The logic of this exchange seemed to have been as follows: if on the one hand, the state funds universities generously, on the other hand the beneficiaries – offspring of the middle classes – would be 'integrated' into established political and ideological

Table 2. Government spending in higher education, 1970–1991 [Millions of Pesos at their value in 1980]

	Technological Institutes	Public universities	Research and Development	Total
1970	\$ 2,214	\$ 4,968	n.a.	\$ 7,538 <sup>a</sup>
1975	\$ 5,323	\$ 14,287	n.a.	\$ 19,611 <sup>a</sup>
1981	\$ 10,500	\$ 20,021	\$ 19,913	\$ 49,714
1985	\$ 6,897	\$ 19,933	\$ 17,431	\$ 44,211
1989	\$ 6,244	\$ 18,827	\$ 13,618	\$ 38,689
1991	\$ 8,883 <sup>b</sup>	\$ 26,784	\$ 19,102	\$ 54,769 <sup>b</sup>

<sup>a</sup> Does not include spending for research and development.

<sup>b</sup> Estimated figures.

Sources: Secretary of Education; Gago 1992; CONACYT, 1992.

values. Throughout the 1970s public discourse on higher education placed great emphasis on the democratic and progressive value of higher education. In the eyes of the consumer, access to the university came to be seen as a *right to a public service* that the state was obligated to offer all citizens (Fuentes 1989). By the same token, the emergence of unions gave professors and administrative workers recourse to collective bargaining in retaining or bettering their positions as employees. Not to be left behind, university functionaries with political ambitions used their institutional power to build up client networks among the various interested publics. Thus, to the extent that a certain *welfare mentality* suffused the culture of the system, a certain kind of *welfare politics* emerged in its basic dynamics.

Within the boundaries and constraints of this set of political relationships, the government attempted to establish planning mechanisms and to set forth general objectives for universities. Through the National Association of Universities and Institutions of Higher Education – an association of rectors founded in the 1950s which was gradually incorporated by successive federal administrations as a semi-governmental planning and consulting entity – the federal government designed and legitimated various national plans for the development of higher education. Objectives were established and specific programs were designed, but implementation was always a flimsy undertaking in a context of the ‘inductive’ relationship between the government and the universities, which were not under any explicit obligation to follow planning proposals. Since funding was tied to the number of student enrolments and not the planning objectives and since universities enjoy administrative autonomy from the government, the efforts of the planning experts generally had little impact on the real development of Mexican higher education throughout the seventies and eighties.

However, important changes in this general scheme of things came about after 1982. The depression triggered by the international debt crisis and the simultaneous decline in oil prices led to restrictive fiscal policies throughout the eighties. The most pressing national issues of the period were basically problems of economic

policy: servicing the foreign debt, controlling high inflation, privatizing public enterprises, reducing the public deficit, and opening the Mexican economy to the world market. The stringency of these policies had important consequences for the social and political fabric: public spending in education, health and urban services was restricted, real income of salaried workers fell drastically (both because of inflation and wage controls), and many jobs were lost in the traditional industrial sectors which were the hardest hit during the post-1982 economic crisis.

In real terms, public funding for higher education and research decreased by approximately 25% between 1981 and 1989, whereas the student population in higher education increased by 15%. In 1981 – the last year of the oil boom in Mexico – government financing for higher education reached a high of 1.02% of the gross domestic product, and over the following eight years it shrank to about 0.77%. Basically, the government stance toward higher education during this period was one of *benign neglect* (Fuentes 1991). Other than the reductions in state financing, no important or specific policy proposals appeared.

The one exception was the creation of the National System of Researchers in 1985 which was created to supplement researchers' income with special individual grants in return for evidence of high productivity in research. This proposal was a result of increasing pressure by scientists whose income had been drastically reduced by inflation and budget cuts, and it received an immediate response on the part of researchers. Over the past seven years more and more academics have been accepted for two and three year grants which are renewable only on the basis of an evaluation by peer committees set up for each discipline. Currently about 6,000 people receive monthly supplements which in some cases cover more than 40% of their total income (CONACYT 1991).

Although this policy proposal involves a very small proportion of Mexican academics, several factors point to its general importance. In the first place, there was clear evidence that Mexican scientists – basically in the natural sciences, bio-medical disciplines and the engineering professions – had reached a new level of maturity as a distinct pressure group within higher education and were able to mobilize with specific demands and high level access to government policy makers. Secondly, this development gave a new legitimacy to *evaluation* as a basic criterion in higher education policy. In the third place, the idea of *differential payments* to academics appeared on stage, in opposition to the homogeneous academic wage policies of the 1970s.

### **Higher education policy in the 1990s**

During the last four years – that is, during the Salinas administration – important changes have come about. In 1988 a high official of the Ministry of Education had this to say about Mexican higher education:

Very few Mexicans are satisfied with the current state of institutions of higher education. Most people are demanding higher quality as well as wider access. These complaints come from within the

educational sector itself as well as from society at large, differing only in the way these complaints are expressed . . . There is a consensus on the essential point: it is imperative that universities and other higher education institutions understand and respond to what other sectors of society expect of them. To summarize, the effectiveness of these institutions is in question (Gago 1988).

There has been a sea change in the overall relationship between higher education and Mexican society and government: the very value of higher education in its traditional form (i.e., the public university model we have described) has been questioned, and various social sectors are demanding new types of course offerings, new academic models, more efficiency and accountability in the use of resources, and greater 'social and economic relevance'. The crisis of confidence in public higher education has been partly demonstrated by the rapid growth of private institutions during the eighties and most especially by the very pronounced trend on the part of business executives and high government officials to send their children to private universities. This shift in preferences has been particularly damaging to the image of public universities which had historically been the training centers for Mexico's élites.

Given this change in the cultural context and the government's conviction that public spending must be kept under control, a new policy has been formulated based on quality assessment and accountability towards public higher education. The basic policy proposals are the following:

1. A process of self-evaluation by higher education institutions.
2. A new mechanism of assessment of the academic disciplines based on external peer evaluation committees which have been recently established.
3. A differential salary scale for academics based on research productivity and the quality of teaching with special salary supplements for full-time academics who meet certain standards.
4. An emphasis on more rational and efficient institutional management.
5. Renewed funding for research and postgraduate studies based on productivity assessment and on the relevance of research products for economic modernization.
6. An emphasis on establishing links between universities and the industrial sector. In this respect, several new 'technological universities' have been founded in close coordination with local businessmen who sit on the governing boards of these institutions.
7. Government's insistence that public universities raise more funds on their own, rather than relying exclusively on government resources. This pressure has led most public universities to substantially raise the fees charged to students.
8. The announcement that the graduates of higher education programs will be assessed externally. The procedures remain to be seen.
9. The establishment of a national entrance examination for upper secondary school graduates going on to higher education has been announced but at the writing of this article there were no operative decisions being made.
10. Increasing governmental pressure on public universities to break their ties with preparatory schools.

This new set of policies has developed in a context of greater public spending in the higher education sector (see Table 2). The government has promised to continue this trend as long as universities respond positively to its policies. However, with the exception of evaluation policy in the postgraduate and research sectors, funding as yet is not directly linked to assessment outcomes but seems to be used as a general incentive for the universities to adopt a 'culture of evaluation' and modernize their structures. Nevertheless, the issue of whether to link funding more directly to assessment is not totally resolved, as there seems to be an ongoing debate on this point within various governmental sectors.

As opposed to trends in Western Europe (Neave and Van Vught 1991) higher education policy in Mexico does not seem to be moving toward greater autonomy for the universities, but rather in the opposite direction toward greater government capacity to *steer* the direction of the system, although there is clearly no governmental intention of actually intervening in the daily operative aspects of institutional life. Rather, there is increasing government interest in the *output* (for example, how many engineering students are being produced as opposed to law students), in the internal *efficiency* of the institutions, and in the *quality* of academic work.

Since this policy is quite recent, it is difficult to pass judgement on it. Several concluding remarks can be made, however, on various emerging processes and several unresolved issues.

1. With respect to *evaluation*, there does not seem to be a unified policy framework, and one could say that basically two policy orientations are at work simultaneously: the 'gentle' introduction of evaluation and accountability on the part of the Under-secretary for Higher Education in charge of undergraduate studies at public universities, and the 'hard line' policy taken by the National Council for Science and Development (CONACYT) toward research and postgraduate studies. In the first case, the basic procedures are institutional self-evaluation and external peer review of the academic disciplines, and the general criterion toward funding is that it not be directly linked to evaluation outcomes. In the second case, funds are allocated to graduate programs and research centers based on the results of evaluation by external peer committees, and those programs that do not qualify are not eligible for public funds. The difference in policies could have something to do with the difference in the type of policy makers pushing for each orientation: on the side of the 'gentle' introduction of evaluation there are government officials who have had a longstanding acquaintance with public universities, whereas the so-called 'hard line' policy makers come from the higher echelons of the scientific community. These differences in policy orientation point to a basic disagreement as to the *purposes* of evaluation: should it be implemented to weed out low quality and to support only high quality programs, or rather should it be used to coax higher education institutions into developing a culture of evaluation which would lead them to better themselves over time?
2. The Mexican system of higher education, which has developed in the absence of



any real assessment culture, finds great difficulty in promoting genuine evaluation procedures and in avoiding a 'culture of compliance' and the consequent bureaucratic games. Further research is needed to determine to what extent evaluation is really taking hold within academic communities themselves and whether basic institutional practice and decision making are changing in the face of evaluation. Some institutions seem to be making an effort to develop useful evaluation procedures, although in many cases there is a great deal of bureaucratic simulation.

3. The government is pushing for the establishment of a national entrance examination and for the separation of preparatory schools from public universities. These two closely linked issues are perhaps the most politicized facets of the current policy scenario. These policies would surely provoke a response by student movements (especially at UNAM, the National University), and on the other hand there are numerous and difficult administrative and political problems involved in separating preparatory schools.
4. It is not clear how the evaluation of individual academics and the new differential pay scales are actually operating. Nevertheless, two things seem to be reasonably certain. First, the actual application of assessment to professors seems to represent a significant learning process for many academics, and this may become an important ingredient in the establishment of a more authentic assessment culture at the operating level of higher education institutions. On the other hand, as academic assessment formalizes the great diversity of talents and products existing in the academic world, Merton's 'Matthew Effect' could easily take hold; this would most likely happen if adequate assessment procedures for teachers, as opposed to researchers, are not developed. In this respect, there is an emerging debate on the various types of academic excellence that inhabit academia (Boyer 1990) and that warrant a diversity of assessment criteria.
5. Will the government develop a new policy to regulate standards in private institutions of higher education? This question has not been posed explicitly in official policy formulations but it is a matter for growing concern in public debate, especially when some private institutions are now receiving government funds for research and postgraduate programs.
6. There do seem to be new things happening in certain sectors of academia. Strong academic groups find this new climate invigorating and there is much international academic exchange going on. There is also a budding demand for high quality postgraduate courses on the part of professors who now see the need to renew or recycle themselves so as to compete for higher salaries.

To conclude, it would not be exaggerated to affirm that in general a new type of silent confrontation/negotiation is going on in Mexican higher education: the old rationale is still operating in the institutions, whose 'memory' can be very long and heavily embedded (Neave and Van Vught 1991), while a new rationale is being forwarded externally by the government. The dynamics released by the opposition of these two rationales are affecting the basic relationships within Mexican higher education. The future course of these relationships will depend on how institutions

respond to this new policy and on whether future government decisions point toward a stronger link between assessment outcomes and funding or whether they continue to stress the 'gentle' introduction of evaluation as a strategy for the middle term.

## Note

1. An important aspect of the Mexican educational system as a whole is that, although almost all children of the relevant age group enter primary education, only about 50% of them actually graduate from sixth grade and an even smaller proportion goes on to lower secondary school. Thus, only about 8 out of every 100 students who enter first grade actually make it twelve years later to higher education. The high dropout rate in the first years of primary school mostly affects the children of the rural and urban poor. The rigorous selectivity of the Mexican educational system is an important social question, not just a matter of academic selection policy.

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## Resumen

Este ensayo brinda una visión de conjunto de los principales cambios producidos en la educación superior mexicana a lo largo de los últimos veinte años, con énfasis en las modificaciones más recientes en las políticas estatales aparecidas durante el gobierno de Salinas de Gortari. Se revisan las principales transformaciones de la expansión no regulada de los años setentas y posteriormente el período de 'abandono benigno' de la crisis de los ochenta. Se subrayan los principales aspectos de las políticas en curso: renovado impulso al financiamiento estatal en un contexto de evaluación institucional e individual, de insistencia en buscar vínculos entre instituciones y aparato productivo, de búsqueda de nuevas formas de financiamiento (especialmente el aumento de cuotas a estudiantes), y de escalas salariales diferenciadas de acuerdo con el desempeño académico. Termina el artículo señalando algunos de los procesos emergentes y algunas cuestiones críticas ('issues') no resueltas en un contexto de pugna entre la lógica tradicional de las instituciones universitarias no acostumbradas a evaluarse y a dar cuentas públicamente de su desempeño, y la nueva lógica de las políticas gubernamentales.