



PERGAMON

Higher Education Policy 12 (1999) 53–67

—HIGHER—  
EDUCATION  
—POLICY—

# The modernisation of higher education in Mexico

Roberto Rodríguez Gómez\*

*Centro de Estudios Sobre la Universidad, Coordinación de Humanidades, Universidad Nacional  
Autónoma de México C.P. 04510, Coyoacan, Mexico, D.F., Mexico*

---

## Abstract

Following the Second World War, higher education in Mexico began a series of fundamental changes that taken together, altered the profile of the traditional university. It developed into a system which in its academic, social and political functions became highly complex as well as diverse, given the variety of institutional options and professional development schemes.

The transition took place both at the institutional level and was system wide. The former was accompanied by expansion in the organisation as a whole. It involved updating the curriculum and the overhaul of administrative, managerial and planning mechanisms. At the latter level, the most significant change involved reforming the major component parts; the territorial distribution of access to education, and carried across the various fields of knowledge and disciplines, bore down on the level and allocation of different funding sources. These developments are best analysed within the perspective context of academic diversification and differentiation. © 1999 International Association of Universities. Published by Elsevier Science Ltd. All rights reserved.

---

## 1. Introduction

In the development of higher education in Mexico from the immediate post war period to the present, several phases of development can be discerned.<sup>1</sup> The first, beginning in the 1950s was taken up with establishing the institutional base of a system of public universities throughout the country, with laying out conditions for scientific research, and with defining the role of the professional academic worker, in effect, the responsibilities of full time members of academic staff and researchers.

---

\* E-mail: roberto@servidor:unam.mx.

<sup>1</sup> For the division of universities development into phases or periods see, among others, Fuentes (1983); Ibarrola (1986); Kent (1992); Padua (1994); Villaseñor (1994); Rodríguez Gómez (1995); Varela (1996).

During the 60s, a new model for university reform was put in place, largely influenced by international trends. It laid considerable stress on strategies for consolidating institutional research and cultural activities. The curriculum was expanded. Graduate studies were strengthened. Faculty training and study abroad were set up around scholarship programmes.

Mexican universities in the 1960s sought to modernise themselves, to forge links with a global model of development that emphasised industrialisation, and the upgrading and preservation of academic excellence.<sup>2</sup>

The 1970s ushered in a different phase, one associated above all with an expansion of the system. The decade saw an unprecedented rise in the number of students, staff, support workers and facilities. Expansion threw up new challenges for universities which, with the design and putting in place of curriculum innovation both at the high school and at bachelor level, also brought in their train the standardisation of planning formulas for the execution of both academic and administrative tasks which in their turn required further adaptation in the framework laying down general standards and setting out institutional regulations.

This phase of expansion which also involved substantial educational innovation, culminated in the first part of the 1980s. From that point on a cycle whose most important features were the redistribution of access to education in all aspects, and the transition from planning schemes to ex-post evaluation formulas and productivity incentives gathered momentum.

The different elements of change introduced into the Mexican higher education system in recent times were the product of a converging number of factors and pressures, of which the most relevant are:

- (a) the relationship between the state and the system of higher education in general and institutions in particular, the expression of these relations through organisational policies and reform strategies;
- (b) social demands placed upon the university;
- (c) the mobilisation of faculty members, students and workers within the institutions; and
- (d) the adaptation to guidelines generated by international models of higher education development

The links between these aspects may serve to draw up a general perspective with which to explain changing trends in the higher education system. It is, however, important to focus on analysing the particular circumstances which accompanied the cycles of expansion and contraction, as well as on the major repercussions they have had upon the current condition of higher education.

---

<sup>2</sup>For the development of Mexican universities in the 1960s see: Urquidi & Lajous (1967); King et al. (1972); Castrejón (1996); and Fuentes (1983). (Translator's note: Some Mexican public universities included High School as a part of their curricular structure.)

## 2. The cycle of expansion

In 1950, the student population at the bachelor's level was under 30 000, which at that time represented 1.3% of young people aged between 20–24 years old. Six years later, enrolment had doubled. By 1960 there were more than 80 000 students at the undergraduate level, that is to say 2.6% of the relevant age group (see Table 1).

Several factors came together in the 1950s and which ushered in the first stage of growth. In the course of that decade the number of public universities doubled. Prior to 1950 there were 12 institutions ranked as universities,<sup>3</sup> including the National Polytechnic Institute.<sup>4</sup> Between 1950 and 1960, 13 public universities were established throughout the country.<sup>5</sup> In 1953 the National Autonomous University of Mexico (UNAM)<sup>6</sup> inaugurated its university city campus. During the 1960s the rate of growth of the previous decade (9.7% annual average) held stable, due mainly to the policy of

Table 1  
Mexico: Higher Education System Bachelors level student body

Year	Population 20–24 years	1st year students	Total university student body	% coverage
1950	2 299 334		28.829	1.30
1955			46.605	
1960*	2 947 072		83.065	2.82
1965			140.848	
1970	4 032 341	65.16	210.111	5.21
1975		149.729	475.888	
1980	6 154 527	196.569	731.291	11.88
1985		225.134	961.468	
1990	7 829 163	241.194	1 078.190	13.77
1995		276.838	1 217.430	

\* Number corresponds to 1961.

Sources: INEGI, 1994. ANUIES, 1995.

<sup>3</sup>The Universidad Nacional Autónoma de México (1910), the Michoacana de San Nicolás de Hidalgo (1917), the Autónoma de Sinaloa (1918), the Autónoma de Yucatán (1922), the Autónoma de San Luis Potosí (1923), the Universidad de Guadalajara (1925), the Autónoma de Nuevo León (1933), the Autónoma de Puebla (1937), the Instituto Politécnico Nacional (1937) and the universities of Colima (1940), Sonora (1942), Veracruz (1943) and Guanajuato (1945).

<sup>4</sup>The National Polytechnical Institute was founded in 1937.

<sup>5</sup>The Universidad Autónoma de Morelos (1953), the Autónoma of Chihuahua (1954), the Instituto Tecnológico of Sonora (1955), the Universidad Autónoma Benito Juárez of Oaxaca (1955), the Autónoma de Estado de México (1956), the Autónoma of Tamaulipas (1956), the Autónoma of Coahuila (1957), the Universidad Juárez of Durango (1957), the Autónoma of Baja California (1957), the Autónoma of Zacatecas (1958), the Universidad Juárez Autónoma of Tabasco (1958), the Autónoma of Querétaro (1959) and the Autónoma of Guerrero (1960).

<sup>6</sup>The student body at the Nacional University's Ciudad Universitaria, totaled 25 000, a figure that doubled in less than 10 years.

consolidating institutions established in the 1950s. Four more universities were founded in that period<sup>7</sup> and despite the fact that universities outside Mexico City began to meet regional demand, more than half the university enrolment at the end of the 1960s was to be found in the capital city.

Against this context background, and given the start of expansion of universities throughout the country, a stage of rapid and profound transformation in the higher education system took place at the beginning of the 1970s. During that decade, expansion was the key element of the transformation experienced, to the degree that growth exerted pressure on institutions to renew their structures, policies and academic as well as administrative practices.

The decision to increase the dimensions of the system took place in a political context in which a reform of the educational system represented an undeniable priority for the government.

The growth and expansion experienced by the system of higher education evolved into a series of conditions that modified the organisational structure of university education as such. Among the traits already mentioned, let us note the following:

First, the break up of the negotiating round among the state, the higher education system, and the demands of different social groups. On one hand, the expansion of access to high school and higher education was a priority for the government, given the social pressures generated by structural processes, particularly the demographic aspect, urbanisation and emergence of the middle class, which coupled with the effects of public education policies during the 1950s and 60s, favoured the growth of basic and secondary education. Added to this was the priority, backed by the government of higher education aligned with economic development. On the other hand, following the crisis brought about by the events of 1968 in Mexico, the executive sought to re-establish its authority and political prestige among the middle classes and amongst intellectuals.<sup>8</sup> This it did by speeding up the assimilation of dissident groups through the time-honoured practice of co-optation. A further move to the same end involved the creation of jobs and employment in public administration, but supporting projects which involved a greater participation of such groups in and thus a commitment to, public institutions and, not unnaturally, those which were both educational and cultural in scope.

On the economic front, government support in favour of higher education development has the solid backing of international consensus inasmuch as higher education was held to be crucial to economic development—a notion which at that time, took the form of solid financing investment for educational projects by international agencies such as the World Bank, the Interamerican Development Bank<sup>9</sup> and private

---

<sup>7</sup> The Universidad Autónoma of Hidalgo (1961), the Autónoma del Carmen (1965), the Autónoma of Campeche (1965) and the Autónoma of Nayarit (1969).

<sup>8</sup> See Zermeño (1981); Bartolucci & Rodríguez Gómez (1983); and Varela (1996).

<sup>9</sup> In this regard, Rocío Llarena says: “The orchestration of this strategy (support for educational programs) was carried out by international agencies such as the Interamerican Development Bank, the International Bank for Reconstruction and Development, and the Agency for International Development. To this end, large amounts of funds for education were transferred in the form of loans, grants, scholarships, etc. In this matter between 1965 and 1975, 451.9 million dollars were transferred to educational systems in Latin American countries” (Llarena, 1991:57).

foundations such as Ford, Rockefeller and Mellon. Politically, the state's strategy of university expansion can be interpreted as a form of assimilation. By the same token, it may also be seen as a form of anticipated response to the social and political demands—and most particularly those of the middle classes. Thus, the commitment to autonomous universities represented not only an opportunity for such classes to put in train the process of change, transformation and development. It also served and assimilated a growing student body.

Secondly, one must take into account the perception, shared amongst academia, that educational reforms and innovation were no less necessary. Against this backdrop, such a conviction spurred on a broad-ranging process of change which extended to the curriculum, to the drawing up of new organisational patterns involving departmental, modular, open and even multicampus systems, the creation of new degree programmes, the updating of those already in place, the introduction of educational technology and to the development of new teaching methods. The thrust of reform also extended to such fields as course content design, faculty training and evaluation—in short, a thorough review of the traditional roles of Faculty and students. It was, in effect, a most comprehensive range of essential transformations.

The educational innovations of the 1970s developed in parallel to and alongside the traditional systems. As we have noted, reform in the university system lay principally in creating new entities rather than modifying existing ones. This took the form of establishing the open university, creating new high schools and units of higher education, developing graduate studies and research, giving support for those bodies involved in cultural promotion and the opening of new universities, among others.

One of the most important aspects in curriculum reform lay in the fact that they derived from two different social constructs. The first of these stemmed from the radical discourse which had been characteristic of the social movement during the 1960s. Its conceptual and methodological elements drew heavily, however, on a pedagogy intended to link higher education with the goals of industrialisation, held to be inherent to industrial economies.<sup>10</sup> In part, such contradictions explain some of the obstacles which programmes designed to overhaul the university met when intention moved on to implementation.

Thirdly, the development of administrative and planning functions as an alternative form of university administration, was scarcely realistic when set against the existing relationship between state and the system of higher education, not to mention the situation which existed within the universities themselves.<sup>11</sup>

The emergence of new individuals and of new social actors within the university and the redefinition of traditional professional, political and social roles certainly modified the university landscape. Expansion opened university access to a more diverse student body—diverse in terms of its social class origin and in terms of its having a higher proportion of women. Universities ceased being primarily urban institutions. It also opened up new paths for professional development. Trades Unions

---

<sup>10</sup> See Rodríguez Gómez (1994).

<sup>11</sup> See Casanova (1996).

and other labour organisations strengthened their role as defenders of the interests of the academic community whilst for its part, the place of the administrator–civil servant assumed enormous weight in the political ecology of the university.

The growth of the university transformed it into a highly important market place for the professions and most especially so for the first wave of students which graduated during this period. For them, the doors to academia were wide open and they could remain in university either as members of academic staff or as junior officials.<sup>12</sup> Furthermore, given the simultaneous growth in the services of the State, job opportunities rose in keeping with rising demand for higher education which expansion itself generated.

### **3. The cycle of stagnation and diversification**

The outstanding feature of the transformations which the university in Mexico dallied with during the 1980s was the loss of precisely that dynamism so evident in the previous decade. In effect, the two basic instruments on which educational policy of the 1970s rested—growth and reform—did not open the way to the further development of the higher education system.

On one hand, by bending to political and economic pressures, the thrust of educational reform, which had turned mainly around establishing curricular alternatives, yielded before an experimentation far less bold in scope. The centre of attention focused on such aspects as developing other major courses or graduate programmes, the reform of study contents and experiments with teaching techniques, the latter particularly in opening up alternative paths of access to learning, often presented in terms of open university provision. This in essence revolved around techniques of self-instruction, distance education and tutorial techniques as well as monitoring the learning process itself.<sup>13</sup>

At the same time, the functions of planning at institutional and system's level acquired great importance in defining educational policy. Such functions acquired additional weight largely as a result of the emphasis placed upon the design and development of strategies and instruments intended to co-ordinate the plethora of planning organisations and which emerged in a series of working agreements between the Public Education Secretariat (SEP), the National Association of Universities and Institutions of Higher Education (ANUIES) and the institutions of higher education.

On the other hand, the strategy of general quantitative growth, gave way before a policy of decentralising the organisations responsible for regulating the conditions of academic work. The upshot of this was not only did the higher education system cease growing. Its ability properly to face demand was no less curtailed. This is not to say

---

<sup>12</sup> See Gill et al. (1994).

<sup>13</sup> For the changes to the university system in the 1980s, see the work of Villaseñor (1994); Padua (1994); Arredondo (1995); Kent (1995) and Rodríguez Gómez (1995).

that higher education remained unchanged from the start to the finish of the decade. On the contrary, it underwent important modifications in such aspects as the geographical distribution of access to study, the vocational orientation of the school population, the balance between public and private institutions and in respect of the proportion of students enrolled at universities and at technological institutions. These changes lend themselves to various and different interpretations.

- *Stagnation in the capacity to meet potential demand.* Despite the fact that during the decade 1980–89, university enrolment showed positive growth, the relative annual increase in the supply of places was equal to the demographic growth rate of those of school age. This means that, despite the effort to maintain a growing supply the ability of the system to accommodate that supply remained unchanged between the beginning and the end of the decade.
- *Differentiation in supply* (universities and technological education). That the technical segment of higher education in Mexico registered during the decade a much higher growth rate compared with the university sector was not particularly significant. Though the number of public institutions of higher education in technology (Technological Institutes) increased significantly more important by far was the fact that such growth went hand in hand with a policy of decentralisation which made it possible to cover virtually the entire nation. However, public sector university places were limited to expanding facilities in already existing institutions.
- *Enrolment increase by disciplinary fields.* In the 1980s, the distribution of enrolments across the main fields of knowledge remained sound. However, new disciplines and fields of learning and science in particular those related to computer science, emerged. At the same time, the demand for the traditional disciplines (law, accounting, administration, medicine and civil engineering) became strengthened. Yet, a trend in the preference for marketable disciplines as opposed to the liberal arts and sciences is quite evident.
- *The balance between public and private systems.* Although throughout the decade the quantitative balance between public and private sectors of higher education did not show significant change (between 16 and 18% of total enrolment found places in private institutions), more important by far is the increase in the number of new private establishments which taught in the main a limited number of traditional disciplines which in turn drew on a minimum amount of facilities and human resources. Thus, a third sector (differing from the humanistic and technological) emerged, gained force, and matured in the present decade.

This shift in strategy—towards diversification instead of concentrated growth—which began in 1982 and continued throughout the decade, is directly tied in with the change in the general model of development adopted during president Miguel de la Madrid's term of office. It can be interpreted within the context of reorganising public administration generally and more particularly the education system which took place during these years.

Mexico faced the economic crisis of the early 80s by introducing changes in the financial domain and in fiscal policy. Reform of public administration involved cutting

public expenditure and streamlining both institutions and bureaucracy.<sup>14</sup> Against this background, the percentage of the natural budget assigned to education was not only severely reduced,<sup>15</sup> but also changed in priority. Public investment in education concentrated primarily on making up for deficiencies in elementary education, and to a lesser degree, on developing new facets of high school education with a technological focus so that students could enter the qualified work-force immediately.

The congruency of this formula can be seen with the changes in priorities that were being set forth by international organisations such as UNESCO, IDB and the World Bank. They recommended that funds be channelled preferably to basic and technological education, since the highest rate of return was obtained in these sectors of education.

Within higher education, particular emphasis was attached to the implementation of planning and evaluation mechanisms and processes of a sectoral nature. If the instruments of change during the expansionary period were growth and innovation, during this latter period the co-ordination and rationalisation of the system's units was favoured. Thus, a cluster of programs and plans was drawn up, the most important of which were: the National Plan for Higher Education in Mexico for the years 1981–91 (ANUIES, 1982), the National Program for Higher Education (PRONAES) in 1983 and the Integral Program for the Development of Higher Education (PROIDES) defined by the SEP and ANUIES in 1986. These programs laid down the structure of institutional, local, regional and national co-ordinating bodies charged with implementing projects which emerged from the planning process.<sup>16</sup>

#### 4. Trends

In the 1990s some trends developed during the previous decade were consolidated, while others have changed course. Here, we shall examine some of the most notable changes, particularly those which deal with the distribution of educational opportunity

##### 4.1. *Changes in distribution by institutional type*

The boom that private institutions experienced during the 80s, held steady and allowed them to increase their presence in higher education. In the first four years of the 1990s, 26 private institutions were set up. This included only one new university—in the

---

<sup>14</sup> In 1982, when Miguel de la Madrid became president, the public sector was going through an unprecedented budget deficit equivalent to 18% of the GDP. The Central Banks reserves were virtually exhausted and the public and private investment reached almost a total halt (See INEGI, 1994:745–748).

<sup>15</sup> In the 1970s the percentage of the government budget oscillated between 30–40%. During the 1980s this percentage fell to 20% (INEGI, 1994).

<sup>16</sup> See Pallán (1993).



state of Quintana Roo, 11 higher education technological institutes, and four so-called ‘technological universities’.

The creation of new schools, and the consolidation and expansion of those created during the previous decade has shifted the balance between public and private entities significantly. The proportion of students registered in public schools, a figure that remained stable during the 80s, fell to 80.9% in 1992. The most recent data is 78%.<sup>17</sup>

#### *4.2. Tendencies in distribution by discipline*

Here, trends established during the last ten years have remained stable. Enrolments continue to drop in such fields as agricultural sciences, the natural and exact sciences as well as the health sciences. In 1989, agricultural sciences enrolled 65 000 students, or 6.2% of total enrolment, a figure that had fallen to less than 3% by 1995.

The phenomenon is repeated in the case of natural and exact sciences, though at a slower pace. In 1989 the discipline accounted for 2.7% of total enrolment, but only 1.9% in 1994. A similar trend is observed in health sciences; between 1989 and 1994 its participation dropped from 11 to 9.5%. In all three fields, total enrolment in 1995 was less than in 1989. The social sciences and management-related fields have maintained their growth. In 1995, slightly more than 50% of all students were enrolled in degree programs in these areas. An analysis based on specific disciplines shows that expansion is due to increased demand in accounting, administrative and computer-related fields.

The area of engineering and technological education rose slightly in recent years, growing at an average annual rate of 3.5%. This is due to enormous demand for professional development in computer science related disciplines.

Finally, education and the humanities has maintained its proportion of 3% with respect to total enrolment—unchanged between 1981 and 1989. Constant demand for degrees in education-related areas has contributed to the relative stability in this field.

#### *4.3. Changes in enrolment distribution by gender*

Differences in demand for higher education, based on gender, are an interesting phenomenon. Two distinct tendencies are discernible: (a) women students have taken advantage of higher education opportunities to the point where they account for almost the same proportion as the males; (b) the phenomenon of relative equality among sexes is due not only to an increase in the proportion of women, but also to a simultaneous drop in the absolute number of men who have sought places in higher education.

In 1981 the proportion of women in higher education was approximately 30%; in 1985 this percentage increased to 35%; in 1989 it reached 39%; and in 1995 it reached

---

<sup>17</sup>Information provided by ANUIES and Sistema de Información Estadística 1995 (SINIES-1995).

45%.<sup>18</sup> The average annual growth rate is very different between men and women; while the rate at which women entered the system grew at an average of 5.6% yearly between 1985 and 1995. Growth rate among males was only 0.1% in the same period. During the 1990s, the number of women has grown continually—the 1995 figure exceeds by more than 150 000 the corresponding statistics for 1985—while the number of men has remained virtually unchanged. The statistics referring to first-time students at bachelor's level show that the number of men entering higher education in 1995 was lower than those registering in 1989. The double tendency of 'feminization' and 'desmasculinization' in higher education enrolment applies across different disciplines, although the proportion varies in each.<sup>19</sup>

We have set out with the purpose of examining the general guidelines for the development of higher education in Mexico. We have analysed the issue of broader access to higher education, the principal priorities set out in public policy towards university education and in particular the trends in matriculation across the three periods under scrutiny. Two major phases or cycles have emerged, the first of which runs from the 1950s through to the start of the 1980s, whilst the second, covering the period of the 1980s and 1990s, is one of recession and system diversification.

During both the previous and the present decades, a clear and progressive loss of dynamism in the policy of growth, set in. In contrast to this situation, the ability of higher education to meet the pressures of social demand has barely held steady.

Even so, the higher education system has evolved in several directions. In the first place, overarching changes have taken place which may be grouped under the heading of enhanced rationality, efficacy and efficiency, both at the systems and at the institutional level and most specifically in the areas of planning and administration. In the second place stands a series of developments mainly in the area of student subject choice with the consequent modifications to vocational preferences which emphasise those degree programs linked to jobs in the service sector and for salaried employment. In the third place, new patterns and new distribution of places are also evident. Such change in patterns are the outcome of the support afforded to those provinces with

---

<sup>18</sup> Data from the annual statistics report of The National Association of Universities and Institutions of Higher Education (ANUIES) and the National System of Information on Higher Education (SINES-1995).

<sup>19</sup> Agricultural-related disciplines continue to be predominantly male (almost 80% of registered students are men), but even in this case the trend has been the incorporation of a large proportion of women. In 1984 the proportion of women was 15.5%, while in 1995 it had risen to 20.9%. In the natural and exact sciences, the growth rate for men was negative in the 1989–95 period, while the incorporation of women grew at an annual rate of 1% in that period. The same occurred in the health sciences, to the degree that women became the majority in that field. In 1985, the proportion of women was 48%, in 1989 it was 55%, and in 1995 it rose to 59.4%. In the social sciences and business administration, registration grew for both men and women, although at a quicker rate among the latter, reverting the proportion among the sexes; in 1985 the proportion of men was 55%, while in 1995 it was 45.7%. In education and the humanities equality among the sexes was achieved at the beginning of the 80s; the proportion of women currently stands at 65.2%. Finally, in engineering and technology, a field typically favored by men, the gap between men to women has progressively narrowed; while women represented 16.5% in 1985, by 1995 they represented 25.5% due to the fact that their registration doubled during that period while male registration rose only 20% (data from the annual statistics report of the ANUIES).

the greatest place deficit, in promoting graduate and technological training inter alia. Finally, in contrast to the stagnation of places in public sector higher education, a significant shift in the balance of public and private universities has taken place to the extent that private universities began to provide an effective alternative to the public sector which has not been able to keep up with social demand for higher education.

### 5. An agenda for discussion

In the international debate<sup>20</sup> over the innovations which universities ought to take on board, a general consensus appears to exist with respect to the basic problems involved—to wit, meeting demand, quality and the appropriateness of the training dispensed. One may perhaps sense a certain convergency around the need to promote certain reforms held to present solutions to the current crisis, just as one may detect a general agreement over the key role which higher education may play in developing that self-sustaining technological capability indispensable if competition is to be maintained in a global economy.

Be that as it may, fundamental differences exist in respect of both the content and the means of implementing such reforms as well as in respect of those measures held to be appropriate for putting them in train.

Although ample agreement exists on the need to achieve a balance between the supply and demand for higher education, just as there is to train a body of graduates, technicians and scientists of sufficient volume and quality to meet the challenge of a global system of production and management, it is nevertheless equally true that less agreement exists with respect of the measures to attain these objectives. Should university systems continue to grow? What techniques of teaching are required? Whose is the responsibility for financing such expansion and modernisation of universities? Who is to define the specific changes which are to be introduced? These and other questions are crucial to moving from an agenda of intentions and objectives to a program of concrete action.

In guise of a conclusion, I will point out some of the challenges that, in my opinion, require a timely solution if we are to enter the 21st Century with a university stronger and one that continues to develop.

- *Demand and quality.* The dynamics of change over the past decade created a broad array of combinations of academic size and quality, ranging from large institutions with satisfactory levels of quality, very small entities with precarious quality standards, and any number of combinations between these extremes. If, in the past, the

---

<sup>20</sup> During the 90s, the debate regarding the crises, processes and alternatives for change for universities has undoubtedly been a priority in the study of higher education systems worldwide. In the Latin American context, there is an abundance of literature referring to these problems; however it is worth reviewing, among others, the texts from CEPAL (1982); World Bank (1994); UNESCO (1995), as well as compilations by Malo & Morley (1996) and Kent (1996).

discourse of educational policy placed meeting educational demand and quality as alternatives to each other, today it is evident that both objectives—improving higher education levels of social demand and upgrading the quality of university functions—are not negotiable. Both must be pursued simultaneously in order to consolidate a system of universities that can compete with the standards already present, in one way or another, in developed and newly industrialised nations.

- *Equality and equity.* Equality engages the capacity of the higher education system to offer opportunities for advanced education to all those who meet the necessary academic qualifications, regardless of social status, gender, age, or any other social or cultural condition. The ability to offer the same opportunities to all requires a continually pursued ‘match’ between the supply and demand present in a system of higher education. This is a difficult task to achieve given the many pressures exerted by external forces and dynamics, such as: demography; policies prevalent in elementary and middle schools and in the labour market. The issue of equal opportunities within higher education does not eliminate problems which exist between social inequality as a whole and higher education. There is in addition, the issue of socially egalitarian education; that is to say, those policies the goal of which is to assure minimum quality standards among the institutions charged with providing a university education. Once we bear this objective in mind, a common goal ought to be to avoid some of the effects which follow from the liberalisation of option paths in higher education, a process which, in general terms, has offset some of the difficulties involved in expanding the number of universities. One of the consequences of such liberalisation is that it results in expanding the different forms of social segmentation by pressing on with an institutionally differentiated system.

- *Institutional diversity.* The current drive towards institutional diversification, which finds its origin in the process of ‘privatising’ educational services as well in functional specialisation within the higher education system itself, has served as a species of safety valve for the financial restrictions placed on public universities. It has also provided an answer to the multitude of social and economic demands which bear down on higher education. Yet, an institutional sector which discharges the functions of higher education, albeit at a level of quality that is far from satisfactory, is an option all too often repeated.

In this situation, the creation or strengthening of accreditation bodies and those procedures which give licence for institutions to teach, to accept students and to award degrees, bodies which from time to time evaluate how universities have performed, is a necessary step. There is every reason to develop further discussion around the topic of accreditation and around the agencies called upon to carry it out, whether they be government bodies, those involved in university administration or non government organisations such as discipline-based learned societies, professions and alumni associations.

- *Regional development.* Higher education institutions modify the environment in which they are founded. They affect the surrounding land value by providing urban infrastructure, cultural activities and employment opportunities. Besides being the focus of attraction for an increased demand for education, they also represent a magnet for regional development. If strategies of decentralising the educational

supply are to be oriented towards regional development, and thereby overcoming a time-lag in the regional distribution of resources, investment has to be made in founding high quality universities in different regions and channelled towards this end. Such a policy deals with the saturation of demand for traditional disciplines whilst at the same time ensuring a better geographic distribution across the national territory of the professions. And, not least, it should make for a better distribution of high quality teachers, researchers and thereby academic standards.

- *Flexible curriculum.* The university's ability to meet the demands of the modern world requires substantive changes in the content of all disciplines (what is taught and why) in teaching methods and the transmission of knowledge (how to teach). It also demands changes in the area of evaluation and certification, all areas where at the threshold of the 21st century, outdated practices still prevail. If modernisation in higher education is to be with effect and to move it to a higher level of development, it demands a process of teaching and learning which is interactive. Students need a wide range of options for training provided by means of flexible curricular modules. And equally necessary is the promotion of continuing education and training as an inbuilt element in the values and professional ethic of academia itself.
- *Financing.* Access to better standards and the expansion of capacity to meet demand have as a condition the extension of the financial base. This is somewhat problematic given the economic recession which countries in the region currently face. Even so, experimenting with other alternatives in cooperation with the private and public sectors, is indispensable. Nor is the recovery of the cost involved in enrolment via systems of grants, loans and any other options, in addition to providing such university-based services as hospitals and clinics, tutorial and consultancies, system management, technological design and patents, any the less urgent.
- *Evaluation and innovation.* The evaluation of university output and productivity now acts as an essential component of the academic process. Evaluation has been related, specifically, to supervision and control of routine tasks, to selective incentives and in some cases to budget and spending accountability. Evaluation takes on a new meaning the moment it encourages those innovations necessary for the advancement of both of the systems modernisation and the overhaul of its component parts. In this sense, establishing a connection between structure and function of both evaluation and innovation is a fundamental necessity.
- *Governability.* University governability<sup>21</sup> is often conceived as that process of negotiation involving a cluster of 'internal' political relations (between University authorities and all actors of academic life) and 'external' political relations (between the university, the public sector and society). It is evident that the long standing pre-eminence of the ties between state and university in defining such relationships is no longer as conducive as once it might have been in establishing those priorities and strategies which advance change.

A more complex system of relations is taking its place, one in which the traditional

---

<sup>21</sup> The Orlando Albornoz article 'La reinención de la Universidad los conflictos y dilemas de la gobernabilidad en América Latina y el Caribe' in Malo and Morely (Eds.) (1996).

actors of university policy interact with a number of newly emerging elements (political parties and interest groups, non-governmental organisations, business leaders, professional associations, religious organisations, social movements, etc.). The university's capacity to lay down stable and productive links which respond to such new demands and responsibilities in contemporary society are a key factor in the dynamics of institutional change.

The seemingly contradictory development of greater autonomy and greater involvement<sup>22</sup> obliges universities to design new instruments with which to satisfy society's demands and of those of the state as the new century looms.

- *Social relevance.* Although institutions cannot guarantee their graduates employment, it is the responsibility of university education to contribute to providing a more flexible professional labour market. Diversifying and reshaping the supply of professional training, improving the quality and applicability of knowledge, promoting the permanent training of professors, designing alternatives for the constant growth in demand, orienting students toward work and productivity rather than exclusively toward being salaried employees, are but a few of the actions and steps that universities may take in an effort to break the vicious cycle.

## References

- ANUIES (1995). *Anuario Estadístico. Vol. Población escolar de nivel licenciatura en Universidades e Institutos Tecnológicos*, México, Asociación Nacional de Universidades e Instituciones de Enseñanza Superior.
- Arredondo Galván, V. (1995). *Papel y perspectivas de la universidad*, México, Asociación Nacional de Universidades e Instituciones de Enseñanza Superior.
- Bartolucci, J. & Rodríguez Gómez, R. (1982). *El Colegio de Ciencias y Humanidades. Una experiencia de innovación universitaria*, México, Asociación Nacional de Universidades e Instituciones de Enseñanza Superior.
- Casanova Cardiel, H. (1996). *Planeación Universitaria: la UNAM 1970–1976*, México, Centro de Estudios sobre la Universidad, UNAM.
- Castrejon Diez, J. (1976). *La educación superior en México*, México, Secretaría de Educación Pública.
- CEPAL (1982).
- CEPAL-UNESCO (1992). *Educación y conocimiento: Eje de la transformación productiva con equidad*, Santiago de Chile, UNESCO.
- de Ibarrola, M. (1986). *La educación superior en México*, Caracas, CRESALC.
- Fuentes Molinar, O. (1983). 'Epocas de la universidad mexicana', *Cuadernos Políticos*, México, ERA, núm. 36, abr.–jun.
- Gil Antón, M. et al. (1994). *Los rasgos de la diversidad: un estudio sobre los académicos mexicanos*, México, Universidad Autónoma Metropolitana.
- INEGI (1994). *Estadísticas Históricas de México*, tomo I, México, Instituto Nacional de Estadística, Geografía e Informática.
- Kent, R. (1987). 'La organización universitaria y la masificación. La UNAM en los años setenta'. *Sociológica*, México, Universidad Autónoma Metropolitana, vol. 2, núm. 5, otoño, pp. 73–120.
- Kent, R. (1992). 'Expansión y diferenciación del sistema de educación superior en México, 1960 a 1990', *Cuadernos de investigación educativa*, México, Departamento de Investigaciones Educativas, Centro de Investigaciones Avanzadas del Instituto Politécnico Nacional, núm. 21.

<sup>22</sup> See for instance, the CEPAL (1992) document.

- Kent, R. (Ed.). (1996). *Los temas críticos de la educación superior en América Latina. Estudios comparativos*, México, Fondo de Cultura Económica, Universidad de Aguascalientes y FLACSO-Chile.
- King, R. et al. (1972). *Nueve universidades mexicanas: Un análisis de su crecimiento y desarrollo*, México, Asociación Nacional de Universidades e Instituciones de Enseñanza Superior.
- Llarena de Thierry, R. (1991). 'El impacto de la planeación en el desarrollo de la educación superior' en Rosa Rojas (comp.), *Planeación: búsqueda y encuentro. Las universidades públicas en México* Guadalajara, Universidad de Guadalajara, tomo I, pp. 95–125.
- Malo, S., & Morey, S. (Eds.). (1996). *La educación superior en América Latina. Testimonios de un seminario de rectores*, Washington DC., Banco Interamericano de Desarrollo y Unión de Universidades de América Latina.
- OCDE (1997). *Review of National Policies for Education*, Mexico, Paris, OCDE.
- Pallan Figueroa, C. (1993). 'La planeación en la historia del desarrollo universitario', en Alfredo Fernández y Laura Santini (comps.) *Dos décadas de planeación en la educación superior*, México, Asociación de Universidades e Instituciones de Enseñanza Superior, pp. 35–52.
- Paduan, J. (1994). 'La crisis en la educación superior y la reforma de las universidades', en Roberto Rodríguez Gómez y Hugo Casanova Cardiel (coords.), *Universidad contemporánea: racionalidad política y articulación social*, México, Centro de Estudios sobre la Universidad, Miguel Ángel Porrúa, pp. 111–169.
- Rodríguez Gómez, R. (1994). 'La modernización de la educación superior en perspectiva', en Roberto Rodríguez Gómez y Hugo Casanova Cardiel (coords.), *Universidad contemporánea. Racionalidad política y vinculación social*, México, Centro de Estudios sobre la Universidad, Miguel Ángel Porrúa, pp. 171–197.
- Rodríguez Gómez, R. (1995). 'Evolución reciente de la matrícula universitaria. Datos y reflexiones', en Humberto Muñoz García y Roberto Rodríguez Gómez (coords.), *Escenarios para la universidad contemporánea*, México, Centro de Estudios sobre la Universidad, UNAM, pp. 33–54.
- Rodríguez Gómez, R. (1996). *Educación superior y desigualdad social. Un estudio sobre las determinaciones sociales y académicas de las trayectorias escolares de los estudiantes de la UNAM*, México, El Colegio de México, Tesis doctoral inédita.
- Rodríguez, J. (1978). 'El concepto de masificación. Su importancia y perspectivas para el análisis de la educación superior', Buenos Aires, UNESCO-CEPAL-PNUD, *Proyecto Desarrollo y Educación en América Latina y el Caribe*, octubre.
- UNESCO (1995). *Policy Paper for Change and Development in Higher Education*, Paris, UNESCO.
- Urquidí, Víctor & Lajous Vargas, Adrián. (1967). *Educación superior, ciencia y tecnología*, México, El Colegio de México.
- Varela Petito, Gonzalo (1993). 'Universidad y desarrollo: el vínculo crítico', en Roberto Rodríguez Gómez y Hugo Casanova Cardiel, *Universidad contemporánea: racionalidad política y vinculación social*, México, Centro de Estudios sobre la Universidad y Miguel Ángel Porrúa, pp. 33–51.
- Varela (1996).
- Villaseñor García, Guillermo (1994). *La universidad pública alternativa*, México, Universidad Autónoma Metropolitana, Centro de Estudios Educativos A.C.
- World Bank (1994). *Higher Education. The Lessons of Experience*. Washington DC., The World Bank.
- Zermeño, Sergio (1981). *México: una democracia utópica. El movimiento estudiantil de 1968*, México, Siglo XXI.