

THE HIGHER EDUCATION IN MEXICO

Special Chapter that describes the general characteristics of the Higher Education Mexican Institutions

Introduction.-

The fundamental objective of this document is to present to WASC, and before the visiting team, the essential characteristics of the Higher Education in Mexico.

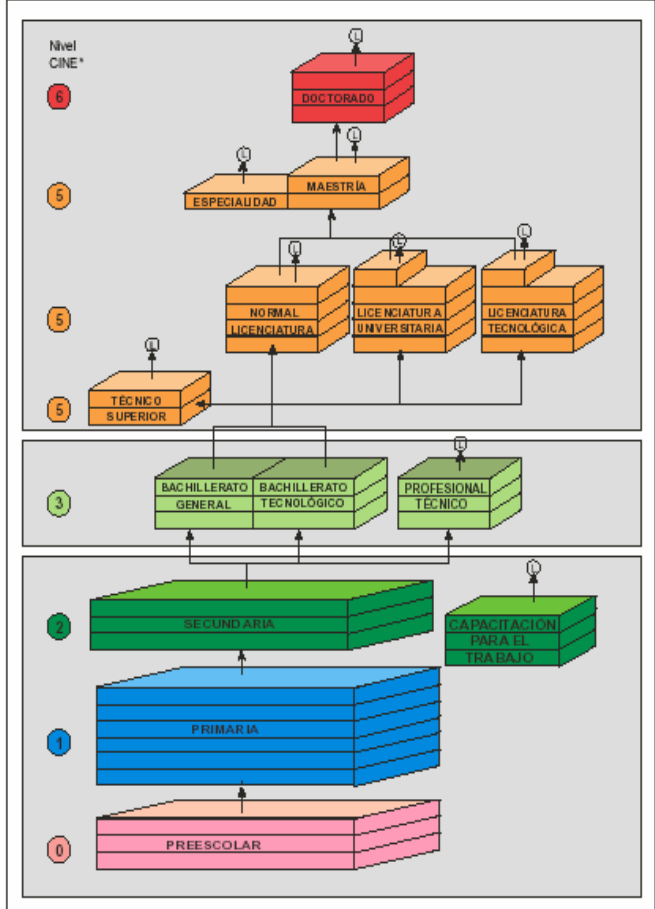
In regards to the educational levels, the National Educational System is divided in the elementary level that includes preschool and elementary school, the medium level that includes junior high school, the technical training programs for work and high school, and the higher level that includes the technical professional degrees, the bachelor's degree, and the postgraduate degree.

As far as the one that is rendering the service, they are divided in Governmental Public Institutions, Public Autonomous, and Private ones.

The elementary education that the government offers is by Constitutional Law Secular, Free, and Compulsory (third article of the Constitution), and it has been created to cover the basic stages of the physical and intellectual growth of the persons.

The structure of the National Educational System is illustrated by levels in the following diagram:

National Educational System



Source: Conference “Overview of the Higher Education in Mexico.”
 Dr. Javier Mendoza Rojas. January 22, 2005. CETYS University.

The levels are explained in this graph in the following way:

- 0. Preschool 3 years
- 1. Elementary..... 6 years
- 2. Basic Medium..... 3 years
 Junior High School or work training
- 3. Higher Medium 3 years
 General High School, or Technical High School, or
 Technical Professional (this one trains the student to work)
- 4. Higher level to a Bachelor’s Degree level ... From 4 to 5 years
 University Degree, Teacher Training College, and
 Technological Bachelor’s Degree (it includes Higher Technician)
- 5. Postgraduate
 Specialty2 years
 Master’s Degree 2 to 3 years
 Doctorate3 to 5 years

Development of the higher education system of Mexico

For more than four and a half centuries, starting in the year 1551 when the Royal Episcopal University of Mexico was founded, this country has been building a higher education system that is the oldest in America, but it is not free of problems and limitations. In the past decades, there has been an explosion of small institutions that offer one or two study programs and that have a small number of students. These institutions interact with the older and bigger universities of the country both public and private ones. These universities can have thousands of students and they offer to them bachelor's degree, specialization, master's degree, and doctorate. Some of them have reached prestige and international recognition.

To understand the change, we have to be aware that at the half waypoint of the XX Century the country had 8 public universities, 5 private ones, and 5 regional technological institutes.

Two decades later, two new universities emerged, 28 new regional technological institutes, 17 agricultural technological institutes, and 3-science and sea technology ones. Specialized universities also emerged in parallel, like the Mexico College, that enriched the variety of Institutions.

Starting in the eighties, there were 87 private universities; it was then when the technological universities and decentralized organisms of the state governments emerged. These had the aim and structure similar to the Community Colleges in the United States that were created with the purpose that the young persons remain in their place of origin. In the year 2000 there were 51 institutions of this kind located in all the states, and with a total population near to 50 thousand students.

Mexico currently has a wide and diverse high education system that includes public and private Higher Education Institutions such as universities, technological institutes, technological universities, polytechnic universities, pedagogical universities, intra-cultural universities, research centers, teacher training school, and specialized education centers. According to information from the Fifth Government Report (2005), in the 2005-2006 school period the school enrollment is estimated in 2,445,628 students, the number of schools (establishments) in 4,876 units, and the number of teachers in 260,150. In addition, based on the data from Format 911 an estimate of 1,774 Higher Education Institutions for the 2004-2005 period. The public system serves 67 per cent of the total enrollment, and the private one the other 33%. The postgraduate studies have grown considerably.

Characteristic of the Higher Education System in Mexico.

The Higher Education in Mexico distinguishes from the United States mainly in the following aspects:

- The Bachelor's Degree is more specialized. This means that it is concerned to give the professional a more or less strong formation in his or her specialty area. The reason for this is because the social, economic, and industrial and technological circumstances of the environment where he or she are going to work demand that when they are out of the bachelor's degree they incorporate to the labor market to apply the knowledge and skills acquired in the Degree. This contrasts with the American system that it is more general, and that is more concerned with getting to the professional more general skills and knowledge and leaving the depth of specialization in the knowledge fields for the Master's Degree.
- Study plan loaded with subjects. There are universities that demand their students to approve 60 or more subjects of their study plans in four or five years; this causes that her or she is more focused towards the accumulation of information.
- Has a minimum of defined credits Nation wide by the Public Education Department: 300 for Bachelor's Degree, 45 for Specialty, 75 for Master's Degree, and 150 for Doctorate. The last three start to count from the Bachelor's Degree (one credit is equal to 16 hours of academic activity). Definitions recorded in the agreement 279 issued by the Public Education Department and published in the Official Journal on July 10 of the year 2000.
- It is complex and heterogeneous. The reason for this is because there exists a great number of Institutions, and this provokes a very big diversity in the plans and study programs.
- Asymmetries in coverage and quality in the Country. This is because there are states with a high degree of advancements (Nuevo Leon, D.F., Jalisco), and there are others lagging behind (Oaxaca, Guerrero...).
- A lot of concentration in a few Universities. Between 20 Universities absorb more than half of the National enrollment that includes more than 2000 Institutions.
- A concentration of a big population in a few degrees. More than 85% of the National enrollment is absorbed by 25 degrees:

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|--|----------------------|---|
| 1 Law | 14 Marketing | |
| 2 Administration | 15 Dentistry | |
| 3 Computer Systems | 16 Civil Engineering | 4 |
| Accounting | 17 Chemical | |
| | Engineering | |
| 5 Industrial Engineering | 18 Economics | |
| 6 Design | 19 Tourism | |
| 7 Medicine | 20 Nursing and | |
| 8 Psychology | Obstetrics | |
| 9 Communication Science | 21 Social Sciences | |
| 10 Electrical and Mechanical Engineering | 22 Veterinary | |
| 11 Education and Teaching | 23 Agronomy | |
| 12 Architecture | 24 Chemistry | |
| 13 International Business | 25 Naval Engineering | |

➤ Few research programs.

Terminal Efficiency and obtaining the Degree.

The most recent Degree Terminal efficiency cycle is from the year 2004, and is calculated as the quotient among graduates from the 2003-2004 cycle and the first time enrollment students in the cycle 1999-2000. In the country is 67.8% with a 66.9% for Public schools, and 69.7% for the Private ones.

When a student finishes his or her higher education degree cycle between 8 and 9 semesters, he or she need to close the educational cycle by obtaining the degree. To obtain the degree represents a high concern for the students because to be able to do it they need, besides finishing their studies, 400 hours of professional practice, 500 or more hours of social service, and to select a graduation option (thesis, postgraduate studies).

The document “title” at the end of the graduation process in an official way is granted and validated by the Public Education Department (its acronym in Spanish is SEP), or directly by the Autonomous Universities or decentralized Institutions.

At the National Bachelor’s Degree level there is a 48.3% graduation rate according to President Fox’s Government report. For the Public Institutions is 46.7% and for the Private ones is 52.5%.

All these diverse institutions, of a public or private nature, have represented an important element of the higher education, and contributed to the diversification of the educational offer given rise to a healthy heterogeneity in a country in search of diversity of perspectives.

This is why to recognize and identify in detail the reached achievements by the higher education in the last two expansion and modernization decades is fundamental as a starting point to indicate the new challenges that it faces.

Among other sound judgments it is worth mentioning the following:

- The technological and polytechnic universities have contributed to the diversification in the direction and the length of the programs that are in close connection with the productive sectors of the regions.
- The Higher Education Institutions have developed a variety of actions that link companies, communities, and social organisms that credit an effort to raise appropriateness and to put the higher education at the service of society.
- It is under way a group of processes and organisms of evaluation, crediting, and certification that in general terms has created an evaluation culture in the Higher Education Institutions.
- The modernization policies directed to the public institutions, articulated in the Integral Institutional Strengthening Program (its acronym in Spanish is PIFI) starting in 2001, have widen and improved in a significant way the physical facilities, the librarian and computer infrastructure, the information and communication technologies, and the laboratories and workshops. Likewise, they have affected, among other aspects, the improvement of the significant activities, the curricular innovation, the modification of educational practices, the development of non-schooling modes, the establishment of tutorial systems to students, and the improvement of the quality of the educational programs.
- Many of the Higher Education Institutions have undertaken academic quality improvement and assurance processes. Aspects like the level of teaching staff, the infrastructure for the support of learning, the postgraduate development programs, research, diffusion and extension, and the evaluation and the crediting of the study programs have been taking care of.
- The country's Federal Technical Institutes established a participative planning scheme through the 2001-2006 Development and Innovation Institutional Program, and they implemented the Educational Model for the XXI Century. Recently, the integration of all the technological institutes was accomplished in a system that allows the design of national interest policies applicable to the socioeconomic reality of the federative entities.

Nonetheless, we need to recognize the persistence of the problems and the appearance of new challenges that limit the reach of the proposed vision and the depth of the accomplishments. The changing social, economic, and political surroundings of Mexico continually elevates the demands from society of the higher education; claiming from it new answers that surpass its current capacities. Therefore, the system requires developing greater levels of flexibility and adaptability to respond to the circumstances in a continuous transformation. Among other problems we identify the following:

- The persistence of Higher Education Institutions with unequal levels of quality and academic appropriateness.
- The breaking up of the higher education system with the previous educational levels, specially the higher medium.
- The system's rigidity to make possible the mobility of students and teachers.
- The limited public financing of the higher education and the lack of suitable criteria for its distribution and execution.
- The insufficiency of the policies to promote the scientific and technological research, and to articulate it with the country's development.

Emerging Functions of the Higher Education.

In short, if we consider the higher education as a way to expand vital opportunities of the individuals and a path that society has to reflect upon itself in an increasing complex and dynamic surroundings, it must offer the young people a personal and professional development space that values freedom, cultural development, and social cohesion. Therefore, regarding the students, there are two great responsibilities that the higher education has: take care to continually improve the quality of education in the cognitive and to orchestrate the knowledge, dexterities, and skills that the individual requires for a professional life in a continuous transformation. The other one is to offer a space where its intellectual autonomy is recognized so its ethical and cultural horizon is widen, and that it is allowed to work hard with the demands and tensions of a globalize world. In regards to its social responsibilities, the higher education is called to operate with flexibility and transparency exploiting new options and strategies of equitable and sustainable development.

The educational plans and programs should consider the new needs that the working world poses, and the professional profiles required in the context of a qualitative mutation in the working ambit. This working ambit comes out of two great trends in the contemporary world: on one hand, the demands of production based on knowledge and its applications, and on the other hand, the uncertainties derived from the movement of capital and the need of a permanent formation. Likewise, it is impossible to postpone considering as hubs of all the higher education the ethical dimension and the humanistic vision. The later one cannot be missing in exercising the careers and that in its contemporary definition includes a new conscience of the relationship between the human species and nature. The transformations of the higher education should be directed by wide criteria of social appropriateness to encourage its integral contribution to the sustainable development of the country, and to the solution of its serious problems with a special attention to the disadvantaged communities.

The inequality in the access to the higher education not only has socioeconomic implications but it also refers, in a fundamental way, to the possibilities of deepening democracy. It is necessary to closely examine the roll of the higher education in the effective application of opportunities for the population of medium and low income.

The National University Association and Higher Education Institutions (its acronym in Spanish is ANUIES) poses the need to strengthen growth of higher education in a strong emphasis of having the educational opportunities equal for everyone. With this direction, it is deemed necessary that for the year 2012 the national higher education coverage be at least 30% of its correspondent group, and that no federative entity has a lower coverage than 20 per cent. Today the national coverage rate is close to 22%, and the coverage range by federal entity goes from 11 to 14%.

To reach this goal and to be in conditions to improve it, it is essential the development of a renewed attention policy at a higher medium level that achieves to overcome the structural, quantitative and qualitative nature problems that afflict that part of the educational system. With a Terminal Efficiency rate that it has not been able to break the 60% barrier, the higher medium level prevails with a funnel that blocks the access to more wide continents of young persons to the higher education. In addition, the quality problems that are recognized in several segments of the higher medium educational system of the country fall in limitations for the graduates to satisfy the enrollment conditions to the Higher Education Institutions, and to be at the level of the academic demands of the programs.

Sources of information:

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