

Universities Offering Online Higher Education in Mexico 2023: Focus on Postgraduate Degrees

José Antonio Villalobos-López

PhD in Finance, Universidad Científica e Idiomas de América Latina (Chiapas, México)

DOI: <https://dx.doi.org/10.47772/IJRISS.2025.903SEDU0001>

Received: 28 December 2024; Accepted: 01 January 2025; Published: 27 January 2025

ABSTRACT

Higher education enables students to obtain a better job and improve their standard of living and can also help the region or country to reach higher levels of development. However, significant challenges such as unequal access, lack of recognition for non-formal programs, and quality assurance issues persist, which hinder the potential benefits of higher education. The aim of this article is to analyze higher education in Mexico in the 2022-2023 school year, as well as to study the non-school-based modality, with emphasis on doctoral and master's degrees. The work is presented using the descriptive method, with a qualitative approach. Data collection techniques included surveys and interviews, while data analysis was conducted through thematic analysis. In Mexico, there are 5.2 million students enrolled in higher education, of which 575,447 are non-school students. The number of distance doctoral students is 11,484, with the most demanded areas of study being education sciences and pedagogy (50.7%). There are 107,728 students registered in non-school-based master's programs, where the areas with the highest student numbers are administration and management (33.6%). This research is relevant as it highlights the impact of non-formal education on the evolution and improvement of higher education, addressing key challenges and providing insights for policy development.

Keywords: distance higher education; postgraduate studies; postgraduate programmes; virtual education.

INTRODUCTION

The United Nations Educational, Scientific and Cultural Organization (UNESCO) structures the different international educational levels through the International Standard Classification of Education (ISCED), as stated by the Secretaría de Educación Pública (2023, p. 65). These levels are classified from 1 to 8; for this work, we are focused on levels 6 (bachelor's degree), 7 (master's degree and specialty), and 8 (doctorate). These levels provide students with professional training that generates specialized knowledge, enabling them to develop their individual capacities. This, in turn, allows them to obtain better jobs and improve their living conditions.

However, despite the structured educational framework, significant challenges persist in the non-formal education sector at the postgraduate level in Mexico. These challenges include unequal access to education, lack of recognition for non-formal programs, and inconsistencies in the quality of education. These issues hinder the ability of higher education to fully contribute to the individual and societal development goals of economic, social, sustainable, and human growth. By addressing these challenges, we seek to provide insights that could lead to improved policies and practices, ultimately enhancing the impact of higher education on both individuals and the broader society.

The aim of this article is to analyze and describe the higher education offered in non-school (distance) mode in Mexico during the 2022-2023 school year. It also aims to precisely identify the universities and postgraduate programs offered, with an emphasis on doctoral and master's degrees provided nationwide in this mode. This research seeks to answer the following questions: How many Mexicans are enrolled in higher education? Which universities have the largest number of students enrolled in higher education? How many higher education students are enrolled in non-formal education? What are the areas of study interest in doctoral and

master's programs offered in non-formal education? How many distance postgraduate students in Mexico obtain their degrees? How many students in distance postgraduate programs obtain their degrees in Mexico?

Having a comprehensive statistical overview of non-formal education ensures that most students are aware of the postgraduate options available to them. This enables them to adapt their specialization requirements and acquire the knowledge necessary for a quality learning experience. The option of distance higher education addresses the learning needs of those who cannot attend face-to-face education due to geographical, family responsibilities, or health conditions. According to Brieger Rocabado (2019, p. 77), the non-school-based modality introduces new roles of self-discipline and self-management for students. This is crucial in an increasingly complex world, as it equips them to meet the high demands of today's labor market. The relevance of this research lies in its potential to enhance understanding of how distance education can improve access to and the quality of higher education. By identifying and addressing key challenges, this study aims to contribute to the development of more effective policies and practices, ultimately supporting the growth and comprehensive development (economic, social, sustainable, and human) of both individuals and the wider society. As distance learning becomes increasingly prevalent in postgraduate studies, particularly in doctoral programs, this research underscores its importance in the evolving educational landscape.

The paper is composed of three parts. The first section describes and analyses higher education in Mexico in general, in the 2022-2023 school year. The second part deals specifically with higher education in the non-school or distance mode in the most recent school year. The third section analyses the postgraduate programmes, focusing mainly on doctoral and master's degrees offered in the Mexican nation in the last school year.

METHOD

This paper follows the descriptive method, as it seeks to analyse characteristics of a particular situation: out-of-school higher education. Descriptive research aims to connect the main components of a reality, specifying the characteristics of a population through a documentary approach and reviewing relevant sources of information (Guevara et al., 2020, p. 165). The descriptive method will allow us to have an overview of the universe or population that we intend to analyse, understanding and clarifying the behaviour of the phenomena that affect the object of study. Data collection is essential within the research process, as it allows us to know the situation and the facts that explain the activity and purpose of those who access postgraduate distance learning studies (Guevara et al., 2020, p. 171). Observation is a fundamental component of the descriptive method; therefore, qualitative data will be obtained, and no causal relationships will be established.

Similarly, within the paradigms, the hermeneutic approach is presented, which is used to interpret texts and contexts, to seek a deep understanding of the meanings and experiences of individuals; also applying the approach of systematic observation, which involves the collection of data through a structured and controlled observation, being able to identify characteristics and patterns within the specific phenomenon of postgraduate distance education.

The information used in this article comes from secondary sources, specifically the Statistical Yearbook of the School Population in Higher Education School Cycle 2022-2023, published by the Asociación Nacional de Universidades e Instituciones de Educación Superior (ANUIES) -National Association of Universities and Institutions of Higher Education- (2023). This study did not employ direct sampling, interviews, or statistical analysis instruments. The data published by ANUIES is presented in Microsoft Excel format, requiring technical knowledge to search for and adapt the data to meet the research requirements. This ensures a comprehensive and dynamic presentation. The data validation method involved cross-referencing the ANUIES data with other educational statistics published by authoritative bodies to ensure accuracy and reliability.

Data analysis techniques included descriptive statistics and thematic analysis. Descriptive statistics were used to summarize and describe the key features of the data, providing a clear overview of the number of students enrolled in various postgraduate programs in the non-school-based modality. Thematic analysis was employed to identify and interpret patterns and themes related to the characteristics and challenges of non-school-based postgraduate studies in Mexico.

The population under study consisted of 5.2 million students enrolled in higher education in Mexico for the 2022-2023 school year, of which 575,447 were non-school students. This population included 11,484 distance doctoral students and 107,728 students enrolled in non-school-based master's programs. By utilizing these methods, the study aims to provide a thorough understanding of the non-school-based graduate education landscape in Mexico, highlighting key trends and issues that inform policy and practice.

RESULTS AND DISCUSSION

For the great philosopher Immanuel Kant, education is established as the primordial task of humanity, in such a way that acting interrelated with his notion of morality, it is configured as an unavoidable and indispensable requirement for human development to be established; indicating that the most complex and difficult arts of the individual are the areas corresponding to government and education, which he appreciates as a prolonged process and which is supplied with the performance of multiple generations of individuals (Ortiz, 2023, p. 160-163).

With the new paradigms of integral development, understood in its economic, social, sustainable and human spheres, education has become a human right. It is assumed that education (especially higher education) makes a substantial and essential contribution to achieving greater economic growth, which leads to higher stages of integral development at regional or national level (Villalobos-López, 2024a, p. 276-277). To the extent that higher education meets requirements such as quality and continuity, it will be possible to achieve better conditions to achieve comprehensive development, which is why Villalobos-López points out: "In this sense, education and development are linked, inferring that education is the engine of change and the propellant that will allow the quality of existence of individuals and society in general to improve" (Villalobos-López, 2024a, p. 286).

The United Nations set out the Sustainable Development Goals (SDGs) in 2015, where number 4 aims to: "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (Naciones Unidas, 2024: par. 1). In reference to higher education, the goal seeks to achieve equality of access to vocational training, where gender and wealth disparities are eliminated, leading to quality higher education.

If education is achieved as stipulated in SDG 4, the United Nations (Naciones Unidas, 2024) sees education as the key to achieving the following integral development goals: 1) If people can obtain a quality education, the cycle of poverty can be broken; 2) Education contributes to reducing inequalities and gender equality is achievable; 3) It enables people to live healthier and more sustainable lives (a concept that emphasises the rational exploitation of natural resources); 4) Education contributes to the achievement of the Millennium Development Goals.

Landing the information for Mexico, according to the Secretaría de Educación Pública (SEP) -Ministry of Public Education- (2023, p. 12), in the 2022-2023 school year, the national education system at all levels (basic, upper secondary and higher) is made up of the following indicators:

- It has 34.7 million students, where the basic level absorbs 69.5 per cent, the upper secondary level 15.5 per cent and the higher level 15 per cent.
- It has 2.1 million teachers, of which 57.3% are at the basic level, 19.7% at the upper secondary level and 23% at the tertiary level. As can be seen, basic education has the highest percentage of students, but higher education has the highest relative participation of teachers (15% vs. 23%), since this level requires subject specialisation.
- It consists of 259,746 schools, of which 88.4% are for the basic level, 8.2% for the upper secondary level and 3.4% for the tertiary level. 84.6% of the student body is made up of teachers. The 84.6% of the student body is enrolled in public schools and the remaining 15.4% in public schools.

To avoid wastage when dropping out of higher education, it is useful to know the average expenditure per student in Mexico. According to information from the Ministry of Public Education (Secretaría de Educación

Pública, 2023, p. 48), the average expenditure per student in higher education is 54,300 pesos in 2021, 55,800 pesos in 2022 and 55,600 pesos in 2023, which represents 2 times more than educational expenditure at the basic level (primary and secondary) and 1.7 times more than at the upper secondary level (baccalaureate). This means that a professional career in Mexico costs the State an average of 222,000 pesos in total (considering four-year careers).

An indicator that allows us to appreciate the use of higher education in a country is the graduation rate of those under 30 years of age who have attained a bachelor's degree, from the Organisation for Economic Cooperation and Development (OECD) in 2020 (Secretaría de Educación Pública, 2023, p. 66), some data are taken from: Japan 43%; Finland and Switzerland 40%; Spain 35%; Turkey 34%; Czech Republic 30%; Italy 29%; and Mexico 27%. Below our country, Chile is the only one with 19% (although a year earlier this nation had 26%). This speaks to the level of professionalisation in developed countries such as Japan, Finland and Switzerland, where higher education is a priority.

Higher education in Mexico school cycle 2022-2023

According to the Statistical Yearbook of the School Population in Higher Education School Cycle 2022-2023, published by the National Association of Universities and Institutions of Higher Education (ANUIES, 2023), there are 5'192,616 students enrolled in higher education in Mexico. The Instituto Nacional de Estadística y Geografía (INEGI) -National Institute of Statistics and Geography- (2023, p. 1) estimates that Mexico's total population as of the first quarter of 2023 is 129 million people, ranking the country as the tenth most populous in the world, below India, China, the United States of America, Indonesia, Pakistan, Nigeria, Brazil, Bangladesh and Russia (INEGI, 2023, p. 2).

Of the 5.2 million higher education students, public universities had 3.3 million students (63.2 per cent of the total) and private universities 1.9 million (36.8 per cent). The National Electoral Institute (INE, 2023) as of September 2023, considers that there are 96.2 million people registered in its electoral rolls, so that 5.4% of the population over 18 years of age will be attending higher education in the 2022-2023 school year in Mexico.

According to information from ANUIES (2023), total enrolment in higher education in the 2022-2023 school year is concentrated in eight states: Mexico City, State of Mexico, Puebla, Jalisco, Nuevo León, Veracruz, Guanajuato, Sinaloa, which account for 58.9% of the total student body, while the remaining 24 states account for the remaining 41.1%. According to information from the National Institute of Statistics and Geography (INEGI, 2022), the average education (schooling) in the country corresponds to 9.7 years.

Mexico City concentrates the largest number of higher education institutions, decades before this concentration was even more remarkable, since the federal higher education institutions with the largest number of students are in its territory: National Autonomous University of Mexico (UNAM), National Polytechnic Institute (IPN), Metropolitan Autonomous University (UAM), among others. In recent years, there has been less student participation in the Mexican capital, but it still concentrates 887.9 thousand students (17.1% of the total), more than double its percentage of the population (17.1% vs. 7.3%). In addition, Mexico City has the highest level of schooling nationally, with an average of 11.5 years of schooling.

The State of Mexico accounts for 13.5 per cent of the national population, but its higher education enrolment corresponds to 565.6 thousand students (10.9 per cent of the total), followed by the following states: Puebla 354.2 thousand (6.8%); Nuevo León 306.9 thousand (5.9%); Jalisco 299.1 thousand (5.8%); Veracruz 255.5 thousand (4.9%); Guanajuato 226.1 thousand (4.4%) and Sinaloa 163.1 thousand (3.1%).

In terms of gender, according to information from ANUIES (2023), 2.8 million women (53.7%) and 2.4 million men (46.3%) are enrolled in higher education; similarly, the Instituto Nacional Electoral (INE) - National Electoral Institute- (2023) publishes that 52% of the electoral roll corresponds to women, while the remaining 48% corresponds to men, which shows that women enrolled in higher education in Mexico exceed their relative participation by 1.7 percentage points (53.7% vs. 52%). These figures indicate that times are changing in our nation, where there are now most women in higher education. It is worth noting that the states

with the highest percentage of women enrolled as a percentage of the total are as follows: Sinaloa with 56.1%; Puebla with 55.8%; and Jalisco with 54.1%.

ANUIES (2023) presents a very complete overview of higher education in the country for the 2022-2023 school year, from which 22 higher education institutions have more than 35,000 students enrolled. The National Autonomous University of Mexico (UNAM), considered the highest university, has 256.4 thousand students enrolled in higher education, representing 4.9% of the country's total. The University of Guadalajara (UDG) is in second place with 142.7 thousand students (2.75% of the total) and last year was in third place. The National Polytechnic Institute (IPN) is in third place this year with 141.2 thousand students (2.72% of the total) and was in second place the previous year. The Autonomous University of Nuevo Leon (UANL) is in fourth position with 134.6 thousand students (2.59% of the total).

These four public universities are in the three main urban areas of the country: Mexico City (UNAM/IPN), Guadalajara (UDG) and Monterrey (UANL), together concentrating 13% of the country's higher education student body. In fifth position is the public Open and Distance University of Mexico (UnADM), with 116.9 thousand students (2.25% of the total), although this institution is perceived to offer only non-formal education.

The Technological University of Mexico (UNITEC) ranks sixth with 110.9 thousand students (1.94% of the total), when a year earlier it was in seventh place. The Universidad del Valle de México (UVM) ranks seventh with 98.7 thousand students (1.9% of the total), last year it was in eighth place. UNITEC and UVM are the private universities with the largest number of students in the country, both of which belong to Laureate International Universities, with nearly 200,000 students between them in the last academic year. Additionally, Laureate owns the University of Professional Development (UNIDEP), which holds 17% of the private for-profit university education market (Huerta, 2022, par. 1).

The Benemérita Universidad Autónoma de Puebla (BUAP) is in eighth place with 93.7 thousand students (1.81% of the total) and last year was in sixth place. From 9th to 22nd place by number of students: Universidad Autónoma de Sinaloa (UAS), Universidad Autónoma del Estado de México (UAEM), Universidad Autónoma de Baja California (UABC), Universidad Veracruzana (UV), Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM), Universidad Autónoma Metropolitana (UAM), Enseñanza e Investigación Superior (TEC Milenio), Universidad Michoacana de San Nicolás de Hidalgo (UMSNH), Universidad Anáhuac, Universidad Autónoma de Tamaulipas (UAT), Universidad Autónoma de Ciudad Juárez, Universidad Vizcaya de Américas (UVA), Universidad Virtual del Estado de Guanajuato (UVEG) and Universidad de Sonora (UNISON).

The 22 universities with more than 35,000 students have around 1.8 million students, representing 34.54% of the national total, with the rest of the institutions accounting for 65.46%. Thus, it can be affirmed that one out of every three higher education students in Mexico is enrolled in one of the twenty-two universities with the largest student body in the country.

From the 1990s to the present, private higher education in Mexico has grown significantly, starting during the Salinas de Gortari administration. In congruence with the above, Didriksson et al. (2016, p. 131; cited by Universidades para el Bienestar Benito Juárez García, 2021, p. 45) show that privatisation is emerging in the first instance, which turns into a commodification of Mexican higher education, observing that from 1994 to 2005 private higher education institutions have presented an exponential growth, which in some entities of the country have registered rates of more than one thousand percent.

The country's leading public universities do not always offer distance education programmes in the same proportion as face-to-face education, with priority given to undergraduate programmes. Among the causes that may explain this phenomenon are: 1) Differences in educational approaches and programmes, as an example non-commercial educational programmes (history, philosophy, ethics, economic development) are not offered in private universities, because they would not have the minimum number of students to financially support these programmes; 2) For online postgraduate programmes, the approach of the traditional professor has to be changed, who exposes to his students, entailing time for preparation of materials, which the students will study

previously; 3) It is required to have updated computer systems and trained staff, so that students and professors can connect.

It should also be noted that public universities only present one or two calls for enrolment per year, while private universities open at least three calls per year (one per trimester or term), specifying fewer requirements and more accessible procedures for student access. Another aspect to highlight is that postgraduate studies (face-to-face and distance learning) take less time in private universities, being able to complete a Master's degree or doctorate in 1 year and 4 months, compared to public universities that generally have two-year plans for Master's degrees and three years for doctorates; in addition, Master's or doctorate degrees are less complex to complete in private education institutions, hence their massive proliferation in recent years.

Non-school-based higher education in Mexico

School-based education has been called traditional, face-to-face or conventional education, while the different non-conventional educational modalities have been designated as non-school-based, open, non-face-to-face, distance, online, virtual, remote or digital education, and some idioms such as online and e-learning have also been recognised (Villalobos-López, 2023, p. 77). Although some differences between the above terms are recognised, they will be treated as equals here.

The Colegio Nacional de Humanidades, Ciencia y Tecnología (CONAHCYT) -National Council of Humanities, Sciences and Technologies- (2021, p. 6) outlines the non-school-based modality, characterised because its teaching and learning process is carried out using an educational technology platform, by electronic means (internet) or by means of active methodologies or autonomous learning methods. In addition, to offer non-formal education, it is necessary to have a solid technological platform of maximum reliability, with tutors trained in this modality and with an adequate infrastructure to offer postgraduate courses.

Among the disadvantages or problems presented by Mexican postgraduate programmes that are unschooled or online are the apparent lack of recognition in the academic environment and the lower valuation in the labour market, even though enrolment has been increasing steadily over the last decade. This problem is even more acute in postgraduate programmes offered by private educational institutions, a controversial, complex and multifaceted issue, where there is a lack or absence of evaluation and accreditation of these programmes.

In completely self-taught programmes, it has been detected that if these habits are not well founded from the undergraduate level, it will be difficult to pursue a quality postgraduate degree, since self-management and self-discipline are two characteristics that are essential in the non-school-based modality, an aspect that is highlighted in methodological issues when research work or the degree thesis is carried out, presenting in some cases up to years of delay in the final work for the completion of the academic degree (Brieger-Rocabado, 2019, p. 72).

The educational quality of distance postgraduate courses offered by private universities is questioned, as they are economic units that must always seek to obtain a return on their investment, which may sacrifice educational quality to achieve economic benefit. It is a widespread opinion that only institutions that charge high tuition fees (ITESM, Ibero, La Salle, Anáhuac, among others) have academic quality in the postgraduate programmes offered. In this sense, the National Postgraduate System (SNP) of the National Council of Humanities, Sciences and Technologies (CONAHCYT, 2024) recognises 2,170 programmes that comply with its guidelines and are of quality:

- Public universities: 1,216 research-oriented programs (56% of the total) and 896 professionally oriented programs (41.3%).
- Private universities: 32 research-oriented programs (1.5%) and 26 professionally oriented programs (1.2%).

As can be seen, 97.3% of the SNP programmes are offered by public universities, while only 2.7% are offered by private universities. Of the 32 research-oriented programmes, by university: 17 are from ITESM, 11 from the Universidad Iberoamericana (Ibero), 4 from the Universidad de las Américas de Puebla, and 2 from other

universities. Of the 26 professional programmes, 15 are from the Ibero, 6 from the Instituto Tecnológico y de Estudios Superiores de Occidente (ITESO), 3 from ITESM and 2 from other universities.

In reference to distance education, Villalobos-López (2024b, p. 108), points out that distance education is not widely accepted within the former National Programme of Quality Postgraduate Programmes (PNPC), now the National Postgraduate System (SNP) of CONAHCYT, since out of 2,204 programs that were registered until April 2022, only 20 non-school-based programs passed the guidelines (0.8% of the total, less than 1%), made up of these universities: University of Guadalajara (UDG): public, 6 master's degrees. Instituto Politécnico Nacional (IPN): public, 2 master's degrees and 1 specialty. ITESM: private, 3 master's degrees. Universidad Autónoma de Querétaro (UAQ): public, 1 doctorate (the only one) and 1 master's degree. Da Vinci University: private, 2 master's degrees. Secretariat of the Navy: public (military) 2 master's degrees. Autonomous University of Zacatecas Francisco García: 1 master's degree. Autonomous University of Carmen (UNACAR): 1 master's degree.

Distance education has allowed the internet to become the main tool as a source of learning and knowledge, as students, in addition to what is taught in classes, can learn and research by accessing the vast world of information. Accordingly, the so-called digital divide must be reduced, so that everyone has access to the internet and the use of new ICTs (Amaya et al., 2023, p. 3).

Until a few years ago, the official information published by the Ministry of Public Education was presented as the sum of enrolment in non-school education and co-education, so it is not possible to make comparisons with the current information. The trend of more women than men at higher education level had already been in place for years, with more women than men completing higher education studies. In this sense, it should be noted: “As occurs in school-based higher education, although with an even more marked profile, the female group is characterised by greater persistence and effectiveness in completing their studies” (Rodríguez, 2017, p. 3).

It should be recalled that the sixth guideline of Acuerdo número 18/11/2018 -Agreement number- (2018) stipulates the three study modalities that apply in Mexico at the higher level: 1) School-based, based on the teaching process in the facilities, where there is coincidence in time and space between students and teachers; 2) Non-school-based, the teaching process is carried out through an educational technology platform, electronic media or through autonomous learning processes and didactic support; 3) Mixed, a combination of both modalities. In this respect, Villalobos-López points out:

The school-based modality is characterized by 100% of class hours with a teacher, the mixed modality may contain teacher mediation from 41% to 99% of the hours established in the programs, and the non-school-based modality contains teacher mediation for a maximum of 40% of the study hours (2020, p. 13; 2023, p. 80).

Table 1. Higher Education Non-School Based Modality in Mexico: 2022-2023

1	U. Abierta y Distancia de México (UnADM)	116,932	20.3%
2	Universidad del Valle de México (UVM)	43,515	7.6%
3	U. Nacional Autónoma de México (UNAM)	38,210	6.6%
4	U. Virtual del Edo. Guanajuato (UVEG)	29,556	5.1%
5	U. Tecnológica de México (UNITEC)	26,484	4.6%
6	Instituto Estudios Universitarios (IEU)	24,625	4.3%
7	U. Internacional Iberoamericana (UNINI)	11,921	2.1%

8	Inst. Estu. Superiores Rosario Castellanos (IRC)	11,886	2.1%
9	Universidad Latinoamericana (ULA)	11,261	2.0%
10	Inst. Educación Digital Edo. de Puebla (IEDEP)	10,025	1.7%
	Subtotal	324,415	56.4%
	Other institutions	251,032	43.6%
	TOTAL	575,447	100.0%

Source: Own elaboration with data from ANUIES (2023): Anuario estadístico de la población escolar en educación superior ciclo escolar 2022-2023.

The ten universities presented together bring together more than ten thousand students enrolled in non-school mode in the 2022-2023 school year. In first position is the Open and Distance University of Mexico (UnADM), which is the response of the Ministry of Public Education to the lack of coverage in the country's large higher education institutions, a free public institution created on 20 January 2012 (Universidad Abierta y a Distancia de México, 2023, par. 10). In the 2015-2016 school year, UnADM had 86,181 students, which corresponded to 36 per cent of the national offer in non-school mode and 75 per cent of that corresponding to Mexico City in that segment (Rodríguez, 2017, p. 6).

UnADM is the federal public institution that concentrates around 116.9 thousand students in virtual mode in the 2022-2023 school year, which accounts for 20.3% of the national higher education distance learning student body. In other words, 1 out of every 5 students studying higher education in non-school mode in Mexico is enrolled in this institution. With little more than a decade of existence, the UnADM has become the fifth higher education institution with the largest number of students at the national level, ranking only behind UNAM, UDG, IPN and UANL.

UVM ranks second in the non-school modality with 43.5 thousand students (7.6% of the total), positioning itself as the private university with the highest enrolment in the 2022-2023 school year. UNAM ranks third in the distance mode, with 38.2 thousand students (6.6% of the total), but until 2023 it had few options for non-school-based postgraduate studies, so it concentrated its efforts on the undergraduate level. Of the large public universities in the country, UNAM is the one that provides the largest offer of distance education in the last school cycle; seven years ago, the institution was in second place in distance mode and accounted for 11.9 per cent of this segment (Rodríguez, 2017, par. 6).

The fourth place is occupied by the Virtual University of the State of Guanajuato (UVEG), which emerged in 2007, depending on the Government of the State of Guanajuato (Universidad Virtual del Estado de Guanajuato, 2023, par. 1-2), with the objective of generating academic programmes in virtual learning environments and using new information and communication technologies (ICT). UVEG has 35.5 students (5.1% of the total) registered for the 2022-2023 school year. With little more than fifteen years of existence, it is the most consolidated state public university in the non-school option.

UNITEC occupies the fifth position in distance mode, with 38.5 thousand students (4.6% of the total). As mentioned before, Laurate International Universities owns UVM and UNITEC, concentrating 81,000 students in non-school mode (12.2% of the total). In sixth place is the Instituto de Estudios Universitarios (IEU), a private university based in Puebla, with 24.6 thousand students (4.3% of the total).

The seventh to tenth positions are occupied by the Instituto de Estudios Superiores Rosario Castellanos (IRC), the Universidad Latinoamericana (ULA) and the Instituto de Estudios Digital de Puebla (IEDEP). The ten universities with the highest enrolment in distance higher education in Mexico have 324.4 thousand students, or 56.4%, which means that one out of every two students in higher education in Mexico are enrolled in one of the ten institutions mentioned above.

It is worth noting that the UDG and the IPN, which are the second and third largest universities in the country, have only 5,303 and 4,909 students registered respectively in non-formal higher education. Of its total educational offer, the UDG has only 3.7% of its students in distance mode, while the IPN has only 3% in this segment, which are meagre programmes for one of the institutions with the largest number of students at the higher level.

Non-school-based postgraduate programmes in Mexico 2022-2023

According to the Ministry of Public Education (Secretaría de Educación Pública, 2023, p. 72), in the 2022-2023 school year, 437,965 postgraduate students are registered nationally, of which women represent 57.2% and men the remaining 42.8%, which shows that women are being trained at the highest level in the country, in greater proportion than men. Postgraduate enrolment is attended by 82,051 teachers who teach in 4,099 educational centres.

In the last academic year, 122,174 students were registered in non-school-based postgraduate studies, representing 21.2 per cent of the total, compared to 90,813 students seven years ago, representing 15.3 per cent of the total, which shows an increase of 5.9 percentage points in distance postgraduate studies over seven years. Of the total number of postgraduate studies in the country, the non-school modality of specialisation absorbed 0.5%; the master's degree 18.7%; and the doctorate 2% of the total. An analysis will be made of the postgraduate studies corresponding to the doctorate and the master's degree. The following table shows the fifteen universities with the highest concentration of students at the doctoral level (the highest degree recognised by the Mexican educational authorities and in general in the world) in non-school mode in the 2022-2023 academic year.

Table 2. Doctoral students in non-school-based modality in Mexico 2022-2023

University	Enrollment		Graduates	
	Students	%	Students	%
Universidad Benito Juárez García (UBJ)	1,504	13.1%	82	5.5%
Universidad Cuauhtémoc (UC)	1,276	11.1%	78	6.1%
Univ. Internacional Iberoamericana (UNINI)	1,248	10.9%	32	2.6%
Inst. de Estudios en Excelencia Profe. (IEXPRO)	805	7.0%	140	17.4%
U. Contemporánea Américas (UNICLA)	443	3.9%	435	98.2%
Centro Estudios S. C. Jurídicas-C. (CESCIJUC)	403	3.5%	56	13.9%
Centro Estudios Univ. Baja California (CEUBC)	280	2.4%	123	43.9%
Instituto Suizo Gastronomía-Hotelería (ISU)	266	2.3%	5	1.9%
Universidad de los Ángeles (UDEA)	234	2.0%	19	8.1%
Centro Veracruzano Inv. Posgrado (CEVIP)	174	1.5%	7	4.0%
Centro Panamericano Estudios Supe. (CEPES)	173	1.5%	13	7.5%
Centro de Aprendizaje y Superación (CAS)	126	1.1%	31	24.6%
U. Virtual del Estado de Michoacán (UNIVIM)	114	1.0%	12	10.5%
ELC Política-Administración Pública O. (ELCAPO)	82	0.7%	115	140%

C. Estu. Superiores Felipe Villanueva (CESFV)	43	0.4%	69	160%
Subtotal	7,171	62.4%	1,217	17.0%
Other Institutions	4,313	37.6%	627	14.5%
TOTAL	11,484	100.0%	1,844	16.1%

Source: Own elaboration. With data from ANUIES (2023). Anuario estadístico de la población escolar en educación superior ciclo escolar 2022-2023. Note: there are more students graduated in some universities, because there was a considerable backlog in their graduation departments, as these degrees correspond to graduates of previous generations, which is why they exceed 100% (this is exactly why they are shown in the table).

It is important to clarify: the graduates presented in the following two tables are generally graduates from universities of other generations, most of whom were studying before the 2022-2023 school year, which is why sometimes when the authorities of the graduation department of the different universities are late or when it is necessary to present a degree thesis, it is common for them to be more than one school year late in obtaining the degree, which is the final culmination of the studies they have completed.

It is also important to note that most doctoral programmes offered by private universities in the non-school modality in Mexico are offered with a professionalised focus and not with a research orientation. This is because these distance doctoral programmes are designed for people who work, who have less time to physically travel to the educational centres and who study to obtain better positions in their workplaces.

The Benito Juárez García University (UBJ) with headquarters in Puebla, has 1,504 students registered in the doctoral level in non-school modality, which represent 13.1% of the total number of doctoral students, presenting in the last school cycle 82 graduated students, corresponding to 5.5% of its enrolment of that year. The Universidad Cuauhtémoc (UC), located in Aguascalientes, registers 1,276 students in the doctoral level in non-school mode, concentrating 11.1% of the students in this degree and presents 78 graduates with a degree, corresponding to 6.1% of its students enrolled in doctoral studies.

The Universidad Internacional Iberoamericana (UNINI), based in Campeche, has 1,248 students registered at the doctoral level in non-school mode, with 32 of its graduates (equivalent to 2.6% of students) achieving the degree. The Instituto de Estudios para la Excelencia Profesional (IEXPRO), registered in Chiapas, concentrates 805 students at the doctoral level in non-school mode, with 140 graduates in the last school year, representing 17.4% of its enrolment. In terms of the number of students graduating at doctoral level, IEXPRO ranks second in the 2022-2023 academic year.

The Universidad Contemporánea de las Américas (UNICLA), located in Michoacán, has 443 doctoral students in the non-school-based modality, representing 3.9% of the total number of doctoral graduates in this modality. UNICLA has 435 graduates with a degree (the highest number of graduates who manage to obtain a degree), representing 98.2% of the enrolment. Thus, it can be affirmed that there was one degree for every student registered in the last school year.

The Centro de Estudios Superiores en Ciencias Jurídicas y Criminológicas (CESCIJUC), based in Mexico City, has 403 students registered in its doctoral programmes in the non-school mode. What is striking is that three previous cycles have not registered any graduates who obtained their degree, and for the 2022-2023 school cycle there are 56 students who obtained their respective degree, which represents the equivalent of 13.9% of its registered students. The Centro de Estudios Universitarios de Baja California (CEUBC) occupies the seventh position with 280 students in the doctoral programme in non-school mode, representing 2.4% of the total of this modality. In terms of the number of graduates with degrees, it occupies third position with 123 students, which is proportional to 43.9% of its enrolment.

At the doctoral level in non-school mode, the country's public universities have a limited offer: the Instituto de Estudios Superiores de la Ciudad de México Rosario Castellanos (IRC) has 155 students in non-school mode (1.3% of the non-school total); the IPN with 55 students (1.1% of the total); UVEG with 39 students (0.1% of the total); UDG with 21 students (0.4% of the total); and UNAM with 7 (0.0%).

The Universidad Virtual del Estado de Michoacán (UNIVIM, 2023) is a decentralised public body with its own legal personality and assets, created by the Government of the State of Michoacán in 2011, currently offering five doctoral degrees, with 114 students in its doctoral programmes in non-school mode (3.4% of the total). UNIVIM (2023) UNIVIM and UVEG are two state public universities, the former has 3,077 students at all levels, which compared to the latter represents 10.3%. Two institutions that stand out in the non-school-based doctoral programmes are the Escuela Libre de Ciencias Políticas y Administración Pública de Oriente (ELCAPO), which has 82 doctoral students, but has 115 graduates in the last academic year, equivalent to 140.2% of its enrolment for that year; and the Centro de Estudios Superiores Felipe Villanueva (CESFV) with 43 doctoral students, with 69 graduates who obtained a degree in the last academic year (160.5% in proportion to its enrolment).

The fifteen institutions presented in Table 2 account for 7,171 doctoral students in non-school mode (62.4% of the total), while the remaining universities account for 37.6%. In the 2022-2023 academic year, the number of graduates of doctoral programmes in non-school-based mode corresponds to 1,844 graduates, of which the fifteen universities mentioned above account for 1,217 graduates with a degree in that year (66% in proportion to the number of registered students).

In other words, just over 3 out of every 5 students on doctoral programmes offered in the non-formal mode are concentrated in one of the fifteen universities mentioned, while those who obtained their doctoral degree in the non-formal mode account for the equivalent of 2 out of every 3 students enrolled. In the 2022-2023 school year, doctoral programmes in distance mode divided by areas of study, favour by far the area of educational sciences and pedagogy, which concentrated 5,826 students (50.7% of the total number of doctoral students in this mode), so that 1 out of every 2 students enrolled in distance doctoral programmes, study one of the areas of educational sciences and pedagogy.

The concentration of students in non-school-based doctoral programmes in education and pedagogy is since they can obtain both economic benefits and personal improvement, since they are job-ready and can earn a higher income with their doctoral degree and have a positive impact on Mexican society. With the qualification for work, doors are opened for better academic and research positions in teaching or research institutions, also allowing teachers to exercise leadership roles, as well as to achieve greater prestige and recognition among their academic peers.

In 2019, the Ley General del Sistema para la Carrera de las Maestras y Maestros (LGSCMM) -General Law of the System for the Career of Teachers- (2019) was issued, where its Article 72 establishes that a scholarship-commission will be granted to those who pursue postgraduate studies (specialisation, master's and doctorate) in higher education institutions, the period being one year for the specialisation, two years for the master's and three years for the doctorate. In its numeral 64, it establishes that education authorities shall promote the teaching service, seeking to strengthen the categories and hours assigned, which in its section IV make them depend, among other factors, on the academic training and postgraduate studies completed.

Article 67 of the LGSCMM empowers education authorities to grant awards, which may consist, according to the third paragraph, of financial incentives, academic mobility programmes, extracurricular courses outside their locality, postgraduate studies or other incentives. The second paragraph of numeral 68 and section III of article 70 stipulate similar incentives for those who are assigned to basic and upper secondary education levels respectively.

In doctoral programmes in administration and management in virtual mode, 1,985 students are enrolled, representing 17.3% of the total number of doctoral programmes; 274 graduates graduated in this area (a proportion of 13.8% of enrolment that year). In third position, the areas of law and criminology had 904 students, representing 7.9% of the doctoral level in non-school mode, with 216 graduates with doctoral degrees (23.9% of the student body).

It should be noted that the areas of the health disciplines in doctoral studies in non-school mode include 376 graduates with a doctoral degree (equivalent to 76% of the enrolment in the last school cycle), therefore, the area of health is the one that achieves the highest terminal efficiency in achieving the doctoral degree in the 2022-2023 school cycle.

Table 3. Non-school-based master's degree students in Mexico 2022-2023

University	Enrolled		Graduates	
	Students	Percentage	Students	Percentage
U. Del Valle de México (UVM)	13,054	12.1%	10	0.1%
U. Tecnológica de México (UNITEC)	11,232	10.4%	1,508	13.4%
U. Internac. Iberoamericana (UNINI)	9,680	9.0%	240	2.5%
Instituto de Estu. Universitarios (IEU)	9,621	8.9%	1,381	14.4%
UNIR México	6,596	6.1%	5,031	76.3%
Universidad Génesis	3,805	3.5%	720	18.9%
U. Virtual Edo. Guanajuato (UVEG)	2,848	2.6%	23	0.8%
U. Ciudadana de Nuevo León (UCNL)	2,344	2.2%	11	0.5%
Inst. Estu. Excelencia Prof. (IEXPRO)	1,892	1.8%	245	12.9%
Universidad Latinoamericana (ULA)	1,851	1.7%	226	12.2%
U. Desarrollo Profesional (UNIDEP)	1,724	1.6%	-	0.0%
I. Suizo Gastronomía-Hotelería (ISU)	1,422	1.3%	384	27.0%
Universidad UNIVER	1,418	1.3%	582	41.0%
U. Digital Edo. México (UDEMEX)	1,314	1.2%	355	27.0%
U. Interamericana p/Desa. (UNID)	536	0.5%	344	64.2%
Centro Universitario ETAC	361	0.3%	417	115%
Aula Digital Méx. (Tech Universidad)	234	0.2%	472	201%
Subtotal	69,932	64.9%	11,939	17.1%
Other institutions	37,796	35.1%	7,189	19.0%
MASTER'S DEGREE TOTAL	107,728	100%	19,128	17.8%

Source: Own elaboration. With data from ANUIES (2023). Statistical yearbook of the school population in higher education school cycle 2022-2023.

Previously, it was noted that the Universidad del Valle de México (UVM) is the private higher education institution with the most students in Mexico; for the master's degree, its first position is once again confirmed, with 13,054 students in the 2022-2023 school year in non-school mode (12.1% of the total). It is strange that UVM has reported to ANUIES only 10 master's degree graduates in the last school year.

The Technological University of Mexico (UNITEC) has the second highest enrolment in distance mode master's degrees, with 11,232 students enrolled (10.4% of the total), presenting 1,508 graduates that school year, which in proportion to its enrolment represents 13.4%. The Universidad Internacional Iberoamericana (UNINI) is in Campeche and occupies the third position with 9,680 students enrolled in non-school-based

master's programmes (9% of the total), with 240 graduates who graduated during the year, which in proportion to its enrolment represents 2.5% of that year's enrolment.

The Technological University of Mexico (UNITEC) ranks second in enrolment in distance mode master's degrees, with 11,232 students enrolled (10.4% of the total), presenting that school year 1,508 graduates, which in proportion to its enrolment represents 13.4%. The Universidad Internacional Iberoamericana (UNINI) is in Campeche and occupies the third position with 9,680 students enrolled in non-school-based master's programmes (9% of the total), with 240 graduates graduating in the year, which in proportion to its enrolment represents 2.5% of that year's enrolment.

The Institute of University Studies (IEU), based in Puebla, is in fourth place with 9,621 students registered in distance learning (8.9% of the total), with 1,381 graduates who obtained a degree, which corresponds to 14.4% of the proportion of its enrolment. In fifth position is UNIR Mexico, based in Logroño, Spain, which has 6,596 distance-learning master's students (6.1% of the total), with 5,031 graduates who obtained a degree, corresponding to 26.3% of all master's graduates that year, and the equivalent of 76.3% of the enrolment. Thus, it can be affirmed that for every 4 graduates who obtained their master's degrees through distance learning, 1 of them did so through UNIR Mexico.

Genesis University is in Nuevo Leon and ranks sixth with 3,805 registered students (3.5% of the total) and 720 graduates, equivalent to 18.9% of the enrolment that year. In the following positions are the Universidad Virtual del Estado de Guanajuato (UVEG) and the Universidad Ciudadana de Nuevo León (UCNL) with 2.6% and 2.2% of the national enrolment in non-school-based master's degrees, with only 0.8% and 0.5% respectively of their enrolment for that year.

Table 3 includes three universities that do not have many students but have a high percentage of graduates in relation to their enrolment: Centro Universitario Aula Digital de México (Tech México Universidad Tecnológica) has 234 students enrolled and 472 graduates who obtained a master's degree in the non-school mode, equivalent to 201.3% of its enrolment for that year. In other words, 2 graduates graduated for every student they had enrolled, which implies an extraordinary terminal efficiency for that year and that the graduates obtained their degrees from generations behind. In other words, with only 0.2% of distance learning master's students, their graduates with a degree represent 2.5% of the national total in this modality in the 2022-2023 school year.

In a similar situation is ETAC University, which has 361 students and 417 graduates who obtained a master's degree in the distance mode (115.5% of its school enrolment that year). This means that with 0.3% of the distance learning master's students, the equivalent of 2.2% of graduates obtained their degree. Other universities that achieved an excellent ratio of graduates to students registered in the last school year are the Universidad Interamericana para el Desarrollo (UNID) and the Universidad UNIVER, which had 64.2% and 41% respectively of graduates in relation to their enrolment in the last school year, which speaks of very good terminal efficiency in their school-based master's programmes.

By areas of study in non-school mode in the 2022-2023 school year, the most demanded master's degrees are in educational sciences and pedagogy, together with teacher training, grouping 34,169 students (31.7% of the national total), presenting 5,921 graduates with a degree, equivalent to 30.9% of their enrolment in that year. It is stated that 1 out of every 3 master's students in the non-formal modality is studying educational sciences, pedagogy or teacher training. Like doctorates, master's degrees in the field of education and training have incentives for teachers, so they are higher levels that enable them to obtain economic and academic incentives and rewards.

Non-school-based master's degrees in administration and management have 36,216 students enrolled (33.6% of the total), which means that 1 out of every 3 master's degree students study the area of administration and management. This area has 7,583 graduates who obtained a degree, representing 39.6% of the country's master's degree graduates in non-school mode or the equivalent of 20.9% of its enrolment. Non-school-based master's degrees in educational sciences, pedagogy and teacher training, administration and management account for 2 out of 3 students in this segment.

The area of business and accounting with 9,455 students enrolled in distance learning master's programmes (8.8% of the total), has 935 graduates, equivalent to 9.9% of the proportion of enrolment that year. The area of social sciences and behavioural studies with 6,658 registered students (6.2% of the total) and 723 graduates, equivalent to 10.9% of enrolment. The area of law and criminology with 6,572 students (6.1% of the total) and with 1,081 graduates, 16.4% of the proportion of students enrolled. In accordance with the objective and the questions formulated at the beginning of the study, the following questions are presented

CONCLUSIONS

In the 2022-2023 school year in Mexico, there are 5.2 million students enrolled in higher education, of which 53.7% are female and 46.3% are male, with Mexico City accounting for 17.1% of the student body. Mexico City accounts for 17.1% of students; the State of Mexico 10.9%; Puebla 6.8%; Jalisco 5.8%; Nuevo Leon 5.9%; Veracruz 4.9%; Guanajuato 4.4%; and Sinaloa 3.1%; these eight entities account for 41.1% of the country's higher education enrolment. Higher education enrolment represents 5.4 per cent of people over 18 years of age in the country. Of the total number of higher education students, 3.3 million are enrolled in public universities (63.2%) and 1.9 million in private universities (36.8%).

There is a universe of 575,447 students in higher education, the universities with the largest number of students are: UnADM 20.3%; UVM 7.6%; UNITEC 4.6%; UNAM 6.6%; UVEG 5.1%; IEU 4.3%; IRC 2.1%; ULA 2.0%; UNINI 2.1%; IEDEP 1.7%. These ten higher education institutions account for 56.4% of the total number of students in non-school mode in the Mexican nation.

For the 2022-2023 school year, the universities with the largest number of students at the doctoral level in non-school mode are: UBJ 13.1%; UC 11.1%; UNINI 10.9%; IEXPRO 7%; UNICLA 3.9%; CESCIIJUC 3.5%; CEUBC 2.4%; ISU 2.3%. These eight private universities contain 54.2% of distance doctoral students. By areas of study, the distance doctorates with the largest number of students are in educational sciences and pedagogy with 50.7% of the total number of students. This is explained by the fact that obtaining a doctoral degree or a speciality and master's degree qualifies teachers to obtain economic and academic incentives, as stipulated in the General Law of the System for the Career of Teachers.

In non-school-based master's programmes, the universities with the largest number of students in the 2022-2023 school year are: UVM 12.1%; UNITEC 10.4%; UNINI 9%; IEU 8.9%; UNIR Mexico 6.1%; U. Genesis 3.5%; UVEG 2.6%; UCNL 2.2%; these eight universities contemplate 54.9% of the national segment. By fields of study, the most popular non-school-based master's degrees are in administration and management, as well as educational sciences and pedagogy and teacher training, which together account for two thirds of the total student body.

The challenge for non-formal education is to improve the quality of the education offered, noting that most postgraduate programmes are currently offered by private universities, which in some cases, as business units, seek economic profit, sacrificing academic standards. Therefore, a balance must be struck between financial returns and providing quality postgraduate education.

REFERENCES

1. Amaya, A. & Cantú, D. & Baca, J. (2023). El statu quo de la educación a distancia en México [The status quo of distance education in Mexico]. *Revista de Educación a Distancia*, 23 (76), 1-18. <https://doi.org/10.6018/red.557411>
2. Acuerdo número 18/11/18 [Agreement number] (2018, noviembre 27) *Diario Oficial de la Federación*. México. https://dof.gob.mx/nota_detalle.php?codigo=5544816&fecha=27/11/2018
3. Asociación Nacional de Universidades e Instituciones de Educación Superior (2023). Anuario estadístico de la población escolar en educación superior ciclo escolar 2022-2023 [Statistical yearbook of the school population in higher education school cycle 2022-2023]. <http://www.anui.es.mx/informacion-y-servicios/informacion-estadistica-de-educacion-superior/anuario-estadistico-de-educacion-superior>

4. Brieger-Rocabado, S. (2019). Evaluación del programa doctoral no escolarizado en el CEPIES como una innovación educativa [Evaluation of the non-school-based doctoral programme at CEPIES as an educational innovation]. *Educación Superior*, 6 (2), 70-78. http://www.scielo.org.bo/pdf/escepies/v6n2/v6n2_a10.pdf?form=MG0AV3
5. Consejo Nacional de Humanidades, Ciencias y Tecnologías (2021, Junio). Programa Nacional de Posgrados de Calidad. Anexo instrumento de evaluación tipo no escolarizada [National Quality Postgraduate Programme. Non-school-based assessment instrument annex], pp. 53. <https://conahcyt.mx/wp-content/uploads/convocatorias/PNPC/2021/Anexo No Escolarizado.pdf>
6. Consejo Nacional de Humanidades, Ciencias y Tecnologías (2024). Portal de consultas del Sistema Nacional de Posgrados (SNP) [Portal for consultation of the National Postgraduate System]. <https://conahcyt.mx/consultas-snp/>
7. Gutiérrez, E., Mendoza, L., Álvarez, J. & González Roldán, K. (2021). Componentes para el aprendizaje con base en materiales de plataformas educativas [Components for learning based on educational platform materials]. *Revista RELEP Educación y Pedagogía en Latinoamérica*, 3 (3), 25-35. <https://doi.org/10.46990/relep.2021.3.3.287>
8. Guevara, G., Verdesoto, A. & Castro, N. (2020). Metodologías de investigación educativa [Educational research methodologies]. *Revista Científica Mundo de la Investigación y el Conocimiento*, 4 (3), 163-173. [http://doi.org/10.26820/recimundo/4.\(3\).julio.2020.163-173](http://doi.org/10.26820/recimundo/4.(3).julio.2020.163-173)
9. Huerta, A. (2022, marzo 9). UVM y Unitec, a dos años de estar en venta [UVM and Unitec, two years away from being for sale]. *24 Horas: Finanzas y Negocios*. <https://www.24-horas.mx/2022/03/09/uvm-y-unitec-a-dos-anos-de-estar-en-venta/>
10. Instituto Nacional de Estadística, Geografía e Informática (2023, julio 6). Comunicado de Prensa Núm. 395/23: Estadísticas a propósito del día mundial de la población [Statistics on World Population Day], pp. 6. https://www.inegi.org.mx/contenidos/saladeprensa/aproposito/2023/EAP_DMPO23.pdf
11. Instituto Nacional de Estadística, Geografía e Informática (2022, febrero 3). Cuéntame de México: Población [Tell me about Mexico: Population]. <https://cuentame.inegi.org.mx/monografias/default.aspx>
12. Instituto Nacional Electoral (2023, septiembre 8). Estadísticas lista nominal y padrón electoral [Statistics on the nominal list and electoral roll]. Registro Federal de Electores. <https://www.ine.mx/credencial/estadisticas-lista-nominal-padron-electoral/>
13. Ley General del Sistema para la Carrera de las Maestras y Maestros [General Law on the System for the Career of Teachers] (2019, septiembre 30). Cámara de Diputados. https://www.diputados.gob.mx/LeyesBiblio/pdf/LGSCMM_300919.pdf
14. Marciniak, R. & Gairín J. (2018). Dimensiones de evaluación de calidad de educación virtual: revisión de modelos referentes [Dimensions of quality evaluation of virtual education: review of reference models]. *Revista Iberoamericana de Educación a Distancia*, 21 (1), 217-238. <https://revistas.uned.es/index.php/ried/article/view/16182/22342>
15. Naciones Unidas (2024, enero 26). Objetivos de Desarrollo Sostenible: Objetivo 4: Educación de calidad [Sustainable Development Goals: Goal 4: Quality Education]. <https://www.un.org/sustainabledevelopment/es/education/>
16. Ortiz, A. (2023). Perspectiva kantiana sobre el Estado y la educación [Kantian perspective on the state and education]. *Sophia, Colección de Filosofía para la Educación*, (35), 159-184. <https://doi.org/10.17163/soph.n35.2023.05>
17. Ponce S. (2023). Acreditación de la formación de licenciatura en modalidad a distancia en México: realidades, reflexiones y cuestiones [Accreditation of distance mode undergraduate education in Mexico: realities, reflections and issues]. *Revista Dilemas Contemporáneos: Educación, Política y Valores*, 10 (2), 1-17. <https://doi.org/10.46377/dilemas.v2i10.3471>
18. Rodríguez, R. (2017, junio 9). Educación superior no escolarizada en México [Non-school-based higher education in Mexico]. *Educación Futura*. <https://www.educacionfutura.org/educacion-superior-no-escolarizada-en-mexico/>
19. Secretaría de Educación Pública (2023). Principales cifras del sistema educativo nacional 2022-2023 [Key figures for the national education system], pp. 144. <https://www.planeacion.sep.gob.mx/Doc/estadistica-e-indicadores/principales-cifras/principales-cifras-2022-2023-bolsillo.pdf>

20. Universidad Abierta y a Distancia de México (2023). Inicio. Nosotros: Historia, misión, visión y objetivo [Home. About us: History, mission, vision and objective]. SEP. <https://www.unadmexico.mx/nosotros/mision-vision-y-objetivos>
21. Universidad Virtual del Estado de Guanajuato (2023). Acerca de la UVEG [About UVEG]. Gobierno del Estado de Guanajuato. <https://uveg.edu.mx/index.php/es/directorio/acerca-de-la-uveg>
22. Universidad Virtual del Estado de Michoacán (2023). Validez Oficial [Official Validity]. Gobierno del Estado de Michoacán. <https://univim.edu.mx/univim-2/validez-oficial/>
23. Universidades para el Bienestar Benito Juárez García (2021). Diagnóstico del programa presupuestario U083 Universidades para el Bienestar Benito Juárez García [Diagnosis of the budget programme U083 Universities for Benito Juárez García's Well-being]. SEP, pp. 50. https://framework-gb.cdn.gob.mx/applications/ubbj/basicos/Diagnostico_Programa.pdf
24. Universidades para el Bienestar Benito Juárez García (2022). Estudiantes y docentes por sede ciclo 2022-2 [Students and teachers by location cycle 2022-2]. SEP, pp. 4. [https://framework-gb.cdn.gob.mx/applications/ubbj/estudiosydocentes/Estudiantes docentes por Sede 2020.pdf](https://framework-gb.cdn.gob.mx/applications/ubbj/estudiosydocentes/Estudiantes%20docentes%20por%20Sede%202020.pdf)
25. Villalobos-López, A. (2020). Universidades en línea en México, una visión económica [Online universities in Mexico, an economic vision]. MPRA Paper. University Library of Munich, pp. 43. <https://mpra.ub.uni-muenchen.de/104480/>
26. Villalobos-López, A. (2023). Los posgrados en México en modalidad no escolarizada (online) 2022 [Postgraduate courses in Mexico in non-school-based (online) modality 2022]. Revista Paraguaya de Educación a Distancia, 4 (2), 76-89. <https://doi.org/10.56152/reped2023-vol4num2-art7>
27. Villalobos-López, A. (2024). La educación superior y el desarrollo integral en México [Higher education and integral development in Mexico]. Sophia. Colección de Filosofía de la Educación, (36), 275-300. <https://doi.org/10.17163/soph.n36.2024.09>
28. Villalobos-López, A. (2024). La educación superior en México, modalidad no escolarizada y posgrado en el área de comunicaciones 2021-2022 [Higher education in Mexico, non-school-based modality and postgraduate studies in communications]. Tesis doctoral en ciencias de la comunicación: Tech México Universidad Tecnológica, pp. 217. <https://doi.org/10.13140/RG.2.2.19432.69129>