



# Online Education, the Option for Mexican Migrants to Reduce Their Educational Disadvantages: the Case of the APRENDE INEA Platform

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**Abstract.** This article is about a longitudinal analysis using the Current Population Survey (CPS) databases published by the United States Census Bureau, specifically the Annual Social and Economic Supplements for the years 1995, 2000, 2005, 2010, 2015, 2020 and 2023, the purpose is to observe the changes and evolution of the educational characteristics of Mexican migrants in the United States. The findings indicate Mexican migrants are at a disadvantage compared to other population groups. These data are compared with the implementation documents and results reports of the *Programa de Plazas Comunitarias* and the APRENDE INEA learning platform, the conclusion is that these programs have contributed to the reduction of the percentage of the population of Mexican origin without high school studies. The most important highlight is the creation and launch of the APRENDE INEA platform in 2022, a tool for online education that gives free access to the Mexican population in the United States and that allows them to obtain elementary or junior high school certificates with official validity from the Mexican Ministry of Public Education what contributes to the reduction of educational disadvantages through the use of technology.

**Keywords:** educational public policy, learning platform, migration.

## 1 Introduction

Some theories have tried to explain the migration phenomenon [1], among them the neoclassical one stands out, which indicates that migration has its basic explanation in the labor aspect [2] or the network theory, which maintains that networks of family, friends, acquaintances or people who belong to the same community of origin increase the chances that an individual will decide to emigrate [3].

The phenomenon of emigration of Mexicans to the United States is not a new issue. Verduzco [4] elaborates a historical account from the beginning of the 19th century to the mid-1990s, and documents various stages that fostered the increase in emigration flows, for example, the implementation of the Bracero Program during the

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1940s and up to the 1960s [5] or the Immigration Reform and Control Act of 1986 (IRCA) that achieved the legalization of three million of immigrants in the United States [6].

In particular, the globalization of the labor market in the 1970s generated a strong push for large groups of people to set out to different regions of the world seeking better employment opportunities, just as neoclassical theory points out [2].

Overall, these changes caused the exponential growth of the Mexican immigrant population in the United States. In 1980 the number of Mexicans was 7.9 million, by the year 2000 there were already 21.7 million and by 2023 they will reach 38.4 million people [7].

It should be noted that this total migrant population is divided into 2 groups: a) 11.5 million people are immigrants, that is, people who were born in Mexico and for some reason went to the United States and b) 26.9 million Americans self-identified as Mexicans, that is, children, grandchildren, great-grandchildren, etc., of Mexican immigrants, and who, in accordance with the Mexican Constitution, article 30 [8], are also recognized as Mexican citizens.

However, migrating to the United States does not guarantee a better situation, since those who arrive in new territories do so with various disadvantages, including the educational level, which impacts their following generations. For example, until 2023 in the United States, 6.1 million people aged 25 years and over of Mexican origin had an educational level less than high school [7]. This means that 28.3% of Mexicans aged 25 and over have an education equivalent only to basic secondary school. This percentage has decreased by approximately half since 1995, where 53.5% of the population of Mexican origin had an educational level less than secondary school [7].

For these reasons, the Mexican government has implemented some educational programs to help its population abroad, such as the Educational Orientation Windows (Ventanillas de Orientación Educativa, VOE), the Educational Attention Modules (Módulos de Comunicación Educativa) or the IME Scholarships Program (IME Becas), but it has been joint work between the Institute of Mexicans Abroad (IME) and the National Institute for Adult Education (INEA) through the Plazas Comunitarias Program emerged in 2001 [9], and which in 2022 creates the online learning APRENDE INEA as a tool for non-enrolment education, what has made possible to obtain elementary or junior high school certificates by giving free access to the Mexican population in the United States.

In this regard, Ceron [10], Alvarado [11] and Medina y Padilla [12] have carried out analyzes on the Community Plazas from different perspectives: Ceron [10] identified some problems that the Plazas faced when the program was just created; Medina and Padilla [11] focused more on the training of advisors and support staff; while Alvarado [12] interviewed students from some Plazas in California, United States, to learn the strengths and weaknesses of the program, from the students perspective. However, so far, no specific analysis or studies have been found on the APRENDE INEA platform given that it is a new resource, created 2 years ago.

Learning platforms, whose first uses were documented in 2002 [13], during the pandemic became indispensable tools for distance education and online education,

showing their usefulness and scope so, after the pandemic, have become part of everyday life.

Based on these considerations, this analysis aims to show the educational disadvantages of the population of Mexican origin in the United States and prove that the implementation of the *Plazas Comunitarias* INEA and its new platform APRENDE INEA has contributed to decrease the disadvantages.

## 2 Method

This is a longitudinal investigation that analyzes the databases of the Current Population Survey (CPS) published by the United States Census Bureau for the years 1995, 2000, 2005, 2010, 2015, 2020 and 2023, specifically the Annual Social and Economic Supplements [7] which is published online in the months of March of each year. It should be noted that the CPS is one of the largest and most recognized surveys in the United States and a primary source of workforce statistics, besides allows identifying the Hispanic origin [14] and within this group the Mexicans.

The objective of this analysis is to identify the educational characteristics of the population of Mexican origin in the United States and show its evolution. This information is compared with the implementation documents and results reports of the Programa Plazas Comunitarias and APRENDE INEA, in order to observe how both initiatives can have a positive impact on Mexicans living in the United States on the reduction of their educational disadvantages.

The processing and analysis of the information in the databases was carried out with the SPSS statistical package (Statistical Package for the Social Sciences), with which information filters could be made to select the target population according to their age, 25 years and older, in addition to making a classification into five population groups (Mexican origin, Hispanic -non Mexicans-, white, African American and Asian) in order to compare the educational level achieved by each of them, and also comparing their results between the selected years. Through frequency analysis and line graphs, it was possible to observe the behavior of the educational level variable over time, as will be presented in the results section.

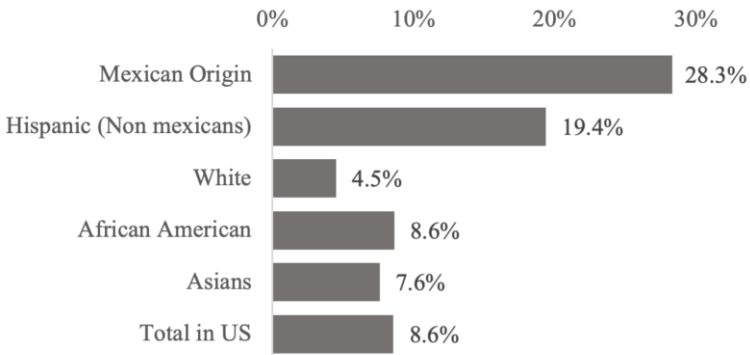
On the other hand, a documentary analysis of the Results Reports of the Plazas Comunitarias Program from 2019 to 2023 was used, published by the Institute of Mexicans Abroad (IME) on its portal [9], as well as the APRENDE INEA platform on the same website.

## 3 Results

In the United States there are educational gaps between the community of Mexican origin and the rest of the population. This goes against not only the community of Mexican origin but also the development of the United States itself, since the population of Mexican origin not only continues to grow (between 2015 and 2023 this popu-

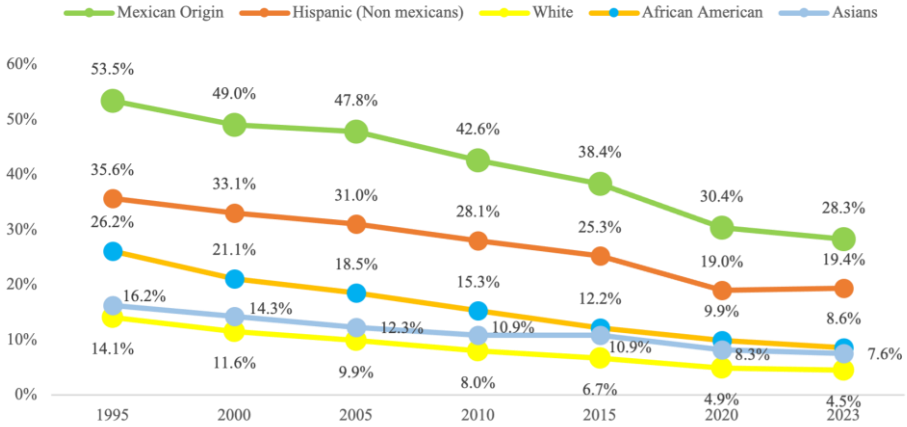
lation grew 8%), compared to zero growth in the white population [7], but they are also the youngest (31 years on average), unlike to the aging that whites (42 years on average), African Americans (37 years on average) and Asians (39 years on average) are experiencing.

Unfortunately, when comparing their educational levels with other population groups, it is observed that the population of Mexican origin, whether born in Mexico or the United States, shows the highest percentages of people without a high school diploma (Figure 1). So, for every white American adult without a high school diploma, there are 6 of Mexican origin.



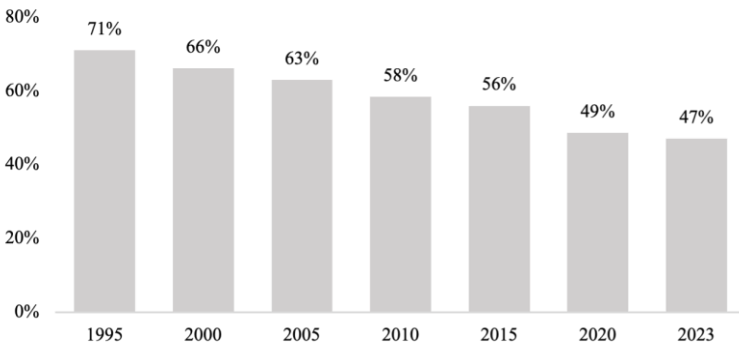
**Fig. 1.** Percentage of population aged 25 or older in the United States without a high school diploma, by population group, 2023. Source: Created by the authors based on data from the Current Population Survey Annual Social and Economic (ASEC) Supplement, U.S Census Bureau, 2023.

The percentages of people of Mexican origin without a high school diploma have decreased over time, but they continue to be the most disadvantaged group, even above other Hispanics, Fig. 2.



**Fig. 2.** Percentage of population aged 25 or older, in the United States, with less than high school education, by population group, 1995-2023. Source: Created by the authors based on data from the Current Population Survey Annual Social and Economic (ASEC) Supplement, U.S Census Bureau, 1995-2023.

However, if within the population of Mexican origin, we select only immigrants (that is, those born in Mexico), the percentage without a high school diploma rises to 47%, Fig. 3. In absolute numbers it means that around 5 million Mexican immigrants in the United States do not have a high school level and within this group 39% only have junior high school, 31% only elementary and 30% less than elementary.



**Fig. 3.** Percentage of Mexican Immigrants aged 25 or older, in the United States, with less than high school education, 1995-2023. Source: Created by the authors based on data from the Current Population Survey Annual Social and Economic (ASEC) Supplement, U.S Census Bureau, 1995-2023.

Under this panorama of disadvantage, it is worth asking if the Mexican government has done anything to support its community. After a documentary review, as well as the platforms of the Mexican government, it was found that currently the Mexican government develops 3 programs related to the educational issue of the community in the United States:

1. The first of them is the Ventanillas de Orientación Educativa Program that emerged in 2009 and consist of a module permanently established in each Consulate where information is provided about educational options in Mexico and the United States [15].
2. The IME Becas program, created in 2005 and which consists of the allocation of an economic support, which can be multiplied through alliances with civil society organizations or educational institutions in the United States, and which is granted to people of Mexican origin on higher studies. The economic support is given on a one-time basis. Although the Program is very kind, it has faced budget changes, originally 10 million pesos were allocated, in 2015 it was increased to 40 million, but in 2019 it was reduced to 9.9 million and by 2021 it reached 15 million, therefore, the budget is changing and number of beneficiaries, too [16].
3. Plazas Comunitarias Program, emerged in 2001 to provide basic education to people over 15 years of age. The program expanded to the United States, due to the demand for educational services, where currently 243 Plazas are available and in 2022 it launched the APRENDE INEA platform so that Mexicans in the United States can study online and obtain their elementary or junior high school certificate [9].

Of these three programs we will highlight Plazas Comunitarias Program and its transition to APRENDE INEA due to the impact it can have on the Mexican community abroad and the effect of the use of technology to reduce educational inequalities.

According to the Evaluations of the Plazas Comunitarias Program in the United States [17], its primary feature lies in the willingness of civil society organizations to launch a Plaza Comunitaria, since they are the ones who provide facilities, equipment and educational advisors (mainly volunteers) and, in general, they are responsible for its administration and operation; while the INEA and the IME support with issues of preparation and delivery of teaching materials, respectively, and follow-up activities.

Therefore, the Plazas Comunitarias remain in operation because of the donations received by the organizations that manage them, registered as non-profit in the 501(c)3 category before the IRS (Internal Revenue Service) in the United States, and in coordination with the Consulates of Mexico and the INEA to provide free services to the community.

Although the main activity of the Plazas is providing literacy and basic education courses, with the issuance of an official certificate of studies from the Government of Mexico, they are also constantly adapting their study plans and training courses depending on the interests of its students and the local population.

Although in 2002 there were only 10 Plazas Comunitarias in operation, in 2014 they reached their highest point with 442 Plazas, however, after that year the number has decreased until it stands at 243 Plazas in 2023.

According to the Results Reports published on the Program portal [9], until 2020, a total of 60,320 users had completed their studies, of which: 19,541 did so in literacy; 23,774 in elementary and 17,005 in junior high school.

During its most recent year of activities, 2023, the Plazas had 19,794 active students in 36 states of the American Union.

The implementation period and work of the Plazas coincides with a marked reduction in the percentage of Mexicans without a high school certificate, especially after 2005, where for 5 five-years periods (2010, 2015 and 2020) the reduction was on average 5.8 percentage points (Fig. 2). Likewise, in the period from 2010 to 2020, the percentage of Mexicans without a high school diploma decreased by 12 percentage points, a greater reduction than in any other population group (Fig. 2)

The performance evaluations do not indicate the causes of the reduction in the Plazas, but without a doubt the long working hours of Mexicans in the United States, the schedules, the distance and the economic situation play against attendance at these services. In addition, during the COVID-19 pandemic, the IME could not deliver the educational materials provided by the INEA to the Plazas in the United States, because shipments in diplomatic bags were reduced to aspects defined as essential or humanitarian aid [17].

Given this situation, the INEA began to launch a learning platform that would allow educational resources, that were previously provided in person, to be placed online. This is how on March 4, 2022 the launch of this new version of the online educational model called APRENDE INEA (<https://aprendeinea.inea.gob.mx>) [18], was made public. The advantages of this model are [18]:

- a. It is a self-study model, in which the user has the flexibility to study from home at the times they have available, since the platform is accessible all the time.
- b. Users can access it from computers, cell phones or electronic tablets.
- c. The contents are downloadable so that they can study anywhere, which allows the user to determine the pace at which they want to advance.
- d. INEA has enabled a support area so that, in the event of technical problems, users can communicate via email to resolve them.
- e. All services provided by APRENDE INEA are completely free.

The educational model of APRENDE INEA is based on 5 modules for elementary school: 2 on language and communication, 2 on mathematical thinking and 1 on life and community; 7 for junior high school distributed in: 2 on language and communication, 3 on mathematical thinking and 2 on life and community; additionally, 3 diversified modules are provided with topics such as digital citizenship, homes without violence and self-care. Each module has several study units, which allows the contents to be aligned with the Mexican educational model.

According to the Activities Report of the Ministry of Public Education during the 2022-2023 cycle, the APRENDE INEA platform provided distance education to 10,490 people in both elementary and junior high school [19], however, the results are

not disaggregated which prevents us from knowing the accurate location of these beneficiaries.

As Artopoulos, Huarte and Rivoir (2020) point out, at a global level we are in a period of platformization, where platforms have had an impact by penetrating the economy, commerce, politics, business, product deliveries, human mobility, public services, education and many other areas [13]. During and after the pandemic, distance education or online classes became part of normality, forcing governments and institutions, at different levels, to implement actions to connect users with the platforms. Such is the case of APRENDE INEA, where the government sees the opportunity to bring educational content to Mexicans abroad while contributing to their training and obtaining degrees and certificates that reduce their educational disadvantages.

## 4 Discussion

There are many economic contributions that Mexicans make in both countries, Mexico and United States. According to data from the CPS 2023, in the United States, 4 out of every 10 agricultural workers and 3 out of every 10 in construction are of Mexican origin [7]. In Mexico in 2023, remittances amounting to 63,313 million dollars [20] were received, which are sent mainly by Mexican migrants to support their families in Mexico.

Therefore, providing Mexican immigrants with educational services, training courses, advice, etc., becomes a priority issue as it provides them with tools through which they can further enhance their development and improve their quality of life.

The Mexican government, correctly but insufficiently, has tried to address the educational needs of Mexicans in the United States, mainly through literacy and basic instruction through the Plazas Comunitarias and now through the APRENDE INEA platform, however, it has always pending tasks to attend and efforts that must be strengthened.

As mentioned in the results section, in the Plazas Comunitarias in the United States, until 2020, nearly 60 thousand Mexicans had graduated and with the APRENDE INEA platform, around 10 thousand have been served in just two years, that is, in just 2 years APRENDE INEA covered one sixth of the population that the Plazas Comunitarias reached in 20 years, this is a clear example of the effect that technology has on the multiplication and maximization of educational services.

However, the number of Mexican migrants without elementary school amounts to 1.5 million people, which means an abysmal gap between achievements and the population that requires educational services.

Although the programs implemented by the Mexican government have not resolved the problem, they have contributed to Mexican migrants in the United States being able to access free and accessible content aligned with the Mexican educational system, and to reducing their disadvantages in this aspect.



But the truth is that both countries can and must change the destiny of this population, seeing it as a shared responsibility for mutual benefit. For the United States, the population of Mexican origin represents the economic force that will support the constant aging process that faces white American population. An immigrant population that has already taken root and does not plan to return to its places of origin in Mexico. On the other side, the government of Mexico can and must take greater responsibilities and actions in favor of the immigrant population, who by law are Mexican citizens too.

In this respect, the APRENDE INEA platform has the potential to reach more and more migrant populations, to bring them closer not only to basic education issues but also to the use of technology, now basic, such as the computer, internet, cell phone, email, and social networks.

It remains for a subsequent analysis to extend the period for reviewing the results of the Learn INEA program to measure its impact.

## 5 Conclusions

The findings of the research allow us to conclude that the population of Mexican origin in the United States is at a clear educational disadvantage compared to other population groups, despite the efforts of the Mexican government to provide them with basic education.

Throughout this paper, relevant information was presented about the educational situation of the Mexican population in the United States, for example, that in 1995, 53.5% of the population aged 25 years and over, of Mexican origin, had an educational level less than a high school diploma and that this percentage decreased to 28.3% in 2023 (in numbers means 6.1 million people), despite this, the Mexican population is at a very clear disadvantage compared to the white population, whose population without a high school diploma is 4.5%, or compared to African Americans whose percentage without a high school diploma is 8.6%. The gap is even greater if within the population of Mexican origin, we select only immigrants (that is, those born in Mexico), since the percentage without a high school diploma rises to 47% (5 million people). Within this group of Mexican migrants, 39% only have junior high school, 31% only elementary school, and 30% have less than elementary school.

It was also noted that under this scenario the Mexican government implemented at least 3 strategies to support the migrant community: the Ventanillas de Orientación Educativas in 2009, the IME Becas program in 2005 and the Plazas Comunitarias Program in 2001, but given that the community of Mexican origin is growing, the services are insufficient, so in 2022 it launched the APRENDE INEA platform so that Mexicans in the United States can study online and obtain their primary or secondary certificate, and just 2 years after launch it has served around 10 thousand people.

Although the Plazas Comunitarias Program, since 2001, and the APRENDE INEA learning platform, since 2022, have contributed to the decrease in the percentage of

the population of Mexican origin without high school studies, the gap that exists between this group and non-Hispanic whites is still 24 percentage points.

However, the arrival of the learning platform APRENDE INEA already means a watershed in the way of providing educational content to Mexicans abroad, in just two years it has achieved an important part what the Plazas Comunitarias program did in 20 years, because, in addition to allowing them to study from wherever they are, the services provided are free and culminate in obtaining an official certificate endorsed by the Mexican Ministry of Public Education.

Providing services through the APRENDE INEA platform not only contributes to the formal education of Mexicans, it also allows them to develop in other fields such as civic participation, leadership, teamwork, negotiation, community and general commitment in education for life.

The way ahead is still long, but only in its first year of implementation the APRENDE INEA platform has reached just over 10 thousand Mexicans, so it is expected that in the near future it can become the educational tool most used by Mexicans abroad.

This proves that the use of technology in the educational field benefits the Mexican population living abroad, since in addition to providing basic educational services, it also allows the appropriation of technology for the benefit of users, which could reduce the existing digital divide in the medium term.

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