CHANGES IN THE PRODUCTIVITY OF SERVICES GRANTED BY THE OPEN HIGH SCHOOL OF THE STATE OF NAYARIT DERIVED FROM THE PANDEMIC

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Abstract: In December 2019, a new coronavirus was identified in Wuhan, China, SARS-CoV-2, naming it the World Health Organization in February 2020 as covid-19, the virus that caused the pandemic. The present work aims to analyze to what extent the provision of educational services of the Open High School of the State of Nayarit, Mexico, caused by the sanitary restrictions derived from the pandemic, was affected through the exploration of information cards of the educational unit, in the 2018, 2019 and 2020 school cycles is a non-experimental, cross-sectional case study with a quantitative approach. Collecting the information regarding covid-19 and the repercussions on education, as well as the Open High School, analyzing the information on the services provided, finding a significant drop in educational productivity since on average it was 12% for the year 2020. Keywords: Affectation, Covid-19, pandemic, open high school, educational services.

INTRODUCTION

PROBLEMATIC SITUATION

Without a doubt, 2020 was a year that will go down in history as the year of the great pandemic caused by the coronavirus covid-19, a virus that had the force to invade and paralyze the entire world.

On December 31, 2019, the World Health Organization (WHO) received the report of the presence of pneumonia, of unknown origin, in the city of Wuhan, in China and in the first days of January they identified the cause: a strain of coronavirus, which is a large family of viruses that can cause disease in both animals and humans. In humans they can range from a common cold to severe acute respiratory syndrome. Covid-19 is the most recently discovered infectious disease caused by the coronavirus. The most common symptoms are fever, dry cough and tiredness.

This disease spreads mainly from a person through droplets that come out of the nose or mouth of an infected person when coughing, sneezing, or speaking, an important measure is social isolation to avoid infecting yourself or infecting other people, due to For this reason, the authorities placed the entire country in quarantine, the agglomeration of people was not allowed as a containment plan to prevent the spread of the covid-19 virus quickly.

The World Health Organization (WHO), on March 11, 2020, declared that covid-19 would go from being an epidemic to a pandemic, this as a consequence of the high levels of spread and severity, as well as inaction of the disease. caused by this virus. The uncertainty generated and the lack of knowledge about the epidemic reached all productive sectors, as well as, without a doubt, the educational sector. The difficulty in stopping the expansion forced governments around the world to apply extraordinary restrictive measures, such as the closure of public buildings, companies, shops, schools, among others, in addition to restricting the mobility of people, in order to reduce the virus spread.

There is no doubt the impact that the closure of activities has had on the education sector that, due to the obligation of the government authorities due to the pandemic, has been drastically affected, with consequences that are not yet quantifiable since it is an unprecedented event. and with great affectations at all levels.

For the education sector, it was March 16, 2019 when the Ministry of the Interior published AGREEMENT number 03/02/20, which says: that

Classes are suspended in preschool, primary, secondary, normal and other schools for the training of basic education teachers of the National Educational System, as well as those of the upper secondary and higher types dependent on the Ministry of Public
Undoubtedly for education in Nayarit, Mexico this was the moment where all educational activities had a suspension of cessation of school activities at all educational levels, having the State Open High School abide by government indications, that is, the temporary closure of the same until the sanitary conditions were safe to continue granting the educational services of this modality of baccalaureate; They were affected drastically, since in order to comply with the approval of the subjects that comprise the curriculum of this type of high school, the presentation of exams in person by the applicant students is required, leaving Until now, all activities, both administrative and teaching, have been suspended due to the health emergency.

The present investigation was prepared with the data obtained from the state information cards 2018, 2019 and 2020, since due to the behavior of the pandemic, the figures and changes in educational policies that change day by day, only data from said period; having as main objective to identify and analyze the changes in the services provided by the Open High School of the State of Nayarit at that time.

ANTECEDENTS

The World Health Organization (2020b) defines covid-19 as follows: coronaviruses are a family of viruses that can cause disease in both animals and humans. In humans, several coronaviruses are known to cause respiratory infections that can range from the common cold to more serious illnesses such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SRARS). The most recently discovered coronavirus causes the coronavirus disease covid-19, both this new virus and the disease it causes were unknown until before the outbreak broke out in Wuhan (China) in December 2019, it is currently a pandemic that affected and continues to affect many countries around the world.

The most common symptoms of this virus are fever, dry cough and tiredness. Other less common symptoms that affect some patients are aches and pains, nasal congestion, headache, conjunctivitis, sore throat, diarrhea, loss of taste or smell, and skin rashes or color changes on fingers or toes.

People can contract covid-19 by contact with another who is infected with the virus, the disease is spread mainly from person to person through droplets that are released from the nose or mouth of an infected person when coughing, sneezing or talk; so it is important to stay at least a meter and a half away from others, these drops can fall on objects and surfaces that surround the person, so it is important to wash your hands frequently or if you don’t have soap and water with an alcohol-based sanitizer (World Health Organization, 2020b).

Isolation is an important measure taken by people with symptoms of covid -19 to avoid infecting other people. Isolation occurs when a person with symptoms of contagion by this covid -19 virus and has to be separated from others due to exposure with people infected with covid-19, the objective is to prevent transmission. (World Health Organization, 2020b)

On March 11, 2020, covid-19 was declared a pandemic. (NCBI National Center for Biotechnology Information, 2020). The first case of covid-19 was detected in Mexico on February 27, 2020. By March 21, 2020, Mexico had confirmed 251 cases and two deaths from covid -19 in Durango and Mexico City. There were suspected cases under investigation in different entities of the Mexican Republic, following up on the intentional search for possible circulation of SARS-CoV-2 in the
country, 64 days after this first diagnosis, the number of patients increased exponentially, reaching a total of 19,224 confirmed cases and 1,859 (9.67%) deaths (Secretary of Health, 2020).

The infections caused by covid-19 for April 30, 2020 worldwide were 3,090,445 people infected and caused the death of 217,769, four months after the first diagnosed case, the average age of the patients was 46 years, the highest number of infected occurs in the age range between 30 and 59 years (65.85%), and there was a higher incidence in men (58.18%) than in women (41.82%). The deceased patients had one or multiple comorbidities, mainly hypertension (45.53%), diabetes (39.39%) and obesity (30.4%). In the first 64 days of the epidemic, China had reported 80,304 cases with a mortality rate of 3.66%. (Suarez et al., 2020)

OPEN HIGH SCHOOL OF THE STATE OF NAYARIT

Baccalaureate or high school is defined as the educational level after basic education and prior to a degree aimed at young people between 15-18 years of age. Having a duration of 2 to 3 years for the school system, also counting in Mexico with the open system, which does not necessarily have a maximum period of duration, all the aforementioned must necessarily be incorporated into the Ministry of Public Education or some university state or national (Directorate of Open Systems of the General Directorate of Baccalaureate (DGB), 2015).

The Federal government in 2012 decreed the compulsory nature of upper secondary education which must be fulfilled in the 2021-2022 cycle, the substantial modifications were as follows:

Article 3. Every individual has the right to receive education. The Federation State, States, Federal District and municipality, will provide preschool, primary, secondary and upper secondary education. Preschool, primary and secondary education make up basic education; This and the upper average will be mandatory. (Official Gazette of the Federation, 2016)

The State will guarantee quality in compulsory education so that educational materials and methods, school organization, educational infrastructure, and the suitability of teachers and principals guarantee the maximum learning achievement of students. (Added by decree published in the Official Gazette of the Federation on February 26, 2013).

II. C) It will contribute to a better human coexistence, in order to strengthen the appreciation and respect for cultural diversity, the dignity of the person, the integrity of the family, the conviction of the general interest of society, the ideals of fraternity and equality of rights of all, avoiding the privileges of races, religion, groups, sexes or individuals, and... (amended by decree published in the official gazette of the federation on February 9, 2012. in the decree published in the Official Gazette of the Federation on February 26, 2013)

III. In order to fully comply with the provisions of the second paragraph of section II, the federal executive will determine the plans and study programs for preschool, primary, secondary and normal education for the entire Republic.

For such effects, the Federal Executive will consider the opinion of the governments of the federative entities, as well as of the various social sectors involved in education, teachers and parents in the terms established by law. Additionally, admission to the teaching service... (reformed by decree published in the Official Gazette of the Federation on January 29, 2016)...
education, indicated in the first paragraph, the state will promote and attend to all types and educational modalities – including initial education and higher education – necessary for the development of the nation, support scientific and technological research, and encourage the strengthening and dissemination of our culture; (amended by decree published in the Official Gazette of the Federation on February 9, 2012)...

Article 31. The obligations of Mexicans are:
I. Make their children or pupils attend public or private schools, to obtain preschool, primary, secondary, upper secondary education and receive the military, in the terms established by law. (Amended by decree published in the Official Gazette of the Federation on February 9, 2012)

In their research work, Salcedo et al. (2016) mentions that, in the Open High School modality, the majority of students who seek to study their baccalaureate through this educational option are workers and students who are over 18 years of age or well those who for some personal reason did not finish their upper secondary education studies, the open high school of the State of Nayarit is a non-school, free, self-taught modality and the time for the presentation of exams is defined by each student, who participates in this modality Being able to take exams throughout the year, to accredit the 33 subjects of which the program is composed, having a minimum of 6 months to conclude their high school studies. Once the student has accredited all the subjects, the Ministry of Public Education issues the baccalaureate certificate with official validity throughout the country.

In particular, the non-school General Baccalaureate (Open High School) dependent on the SEP, in Nayarit as in other entities of the country, represents an educational option for all those students who want to start or finish their baccalaureate studies and do not have the same opportunities than students who study their high school, either due to lack of time or some other situation in which the applicant is immersed. The services it provides are the following according to the main Educational Services cedulas: student advising, registration, issuance of certificates, request for exams, presentation of exams, in terms of complementary educational services, there is issuance of credentials, issued certificates, updating of academic history, review of results, academic reviews, area changes, grade waivers, partial certificates issued. (Salcedo et al., 2016 p.21)

The study of the subjects is carried out by the interested party according to their own rate of progress and learning possibilities, they will decide the order to apply for the subjects based on their previous knowledge. No maximum times are established to complete the studies, the minimum period is 6 months for the conclusion of their baccalaureate studies. Students who wish to conclude in the open high school system can present an equivalency resolution from where they began their studies and the time would then be less for their conclusion. One more advantage is the economic one, since registration is free and it is carried out permanently since there are no school cycles, it does not imply an admission exam, the only requirement being to have finished high school and to attend an “Informative Talk” prior to the beginning of your examination request.

As mentioned in the Registration and Control Standards for Open High School, SEP (2009), in addition to advisory services, official documents referring to their studies, certificates, certificates, school credentials are also free except for exam fees, duplicate of credential and duplicate of the Completion and/or Partial Certificate, whose cost is affordable.

As already indicated, both the application
and the presentation of exams are carried out throughout the year, in fortnightly phases and are scheduled in monthly stages, scheduled in the “Exam Application and Presentation Calendar”, which are scheduled at national level by the General Directorate of Subsystems, which will be requested according to the needs of each of the students.

The Open High School authorizes the extemporaneous application of exams in the following cases: to support the graduation of the students to accelerate their completion of their studies, which consists of the presentation of weekly exams, being the only requirement that they have accredited 60% of the subjects of the program, to people who work on weekends, as long as they present a letter of reasons on letterhead and signed by the head of the institution or company where they provide their services, a document that must be renewed every 6 months. There is no limit of opportunities to credit the subjects and this allows the student to achieve his objective.

Once the student accredits the 33 subjects, the Ministry of Public Education issues the corresponding certificate with official validity throughout the country. There is no limit of opportunities to accredit the subjects and this allows the student to achieve his objective.

OFFICIAL DECLARATION OF A HEALTH EMERGENCY

The agreement of the General Health Council declares the epidemic of disease caused by the SARS-CoV2 virus (covid-19) as a health emergency in Mexico due to force majeure, published in the evening version of the Official Gazette of the Federation on the 30th March 2020, based on article 427 section I of the Federal Labor Law.

Article 427.- The causes of temporary suspension of labor relations in a company or establishment are: I. Force majeure or unforeseen circumstances not attributable to the employer, or his physical or mental incapacity or his death, which occurs as a necessary consequence, immediate and direct suspension of work.

Therefore, labor relations are suspended as of the publication in the Official Gazette of the Federation (March 30, 2020) with the exception of essential supplies, goods and merchandise, which must be ensured during the emergency situation derived from the epidemic caused by covid-19 in Mexico.

For the educational sector, it was on March 16, 2019 when the Ministry of the Interior published AGREEMENT number 03/02/20, which states: that “classes are suspended in preschool, primary, secondary, normal and other schools for the training of basic education teachers of the National Educational System, as well as those of the upper middle and higher types dependent on the Ministry of Public Education”. (Official Gazette of the Federation, 03/16/2021).

Justification

Faced with the covid-19 pandemic that has become a global problem, the population has been enveloped in a climate of terror and concern among the population about what is happening in all sectors., It is of special interest to know what are the problems that have affected this pandemic caused by covid, the high contagion of the virus to -19 in the educational sector, specifically the baccalaureate in its modality of Open High School in the state of Nayarit, Mexico.

In a very short time due to the pandemic, schools and universities around the world closed their doors, affecting, according to data from the United Nations Educational, Scientific and Cultural Organization
(UNESCO), (2020) 1,570 million students in 191 countries, consequently it has brought consequences to all the actors that intervene in the world education sector.

The temporary suspension of educational activities in Mexico as of March 13, 2020, left students immersed in uncertainty about their immediate school future due to the pandemic, since completing their studies, especially for the baccalaureate level, satisfactorily is a requirement. The completion of studies is essential to enter any Institution of Higher Education in Mexico. And not knowing how long the impact of the pandemic will last on his school life.

The present investigation has the purpose of identifying what are the effects suffered by the educational services provided by the educational agency, trying to quantify the withdrawal of the demand that had been taking place, in the period 2018 to 2020, since once estimated some effects of the cessation of school activities, due to the covid-19 pandemic, will help the authorities responsible for this modality to develop policies and strategies in which activities can be resumed and comply with the reason of guaranteeing upper secondary education within this school modality...

**OBJECTIVE**

Analyze the effects that the provision of educational services has suffered in the Open High School of the State of Nayarit, in the years 2018, 2019 and 2020 caused by the sanitary restrictions derived from the covid-19 pandemic, with the purpose of quantifying the effects on the provision of services of this dependency.

**MATERIALS AND METHOD**

The type of research to be used to carry out this work is a case study. A case study is considered to be data that describes a specific reality in any of its stages or processes, so that when a group or community is analyzed, each of its members forms an active part of that case, giving meaning to the relationships among the other factors that make up the total unit.

It was determined that the investigation is of a non-experimental type because it was only based on the observation of the object of study, which in this case will be the Open High School of the State of Nayarit, without manipulating any variable since all the investigation will be carried out, with your data within its facilities. The form of design will have to be cross-sectional because the study will be in a single moment, which will be within the years 2018-2020.

The approach selected for the investigation is quantitative, since statistical tools and statistical software will be used to analyze the results of the tools applied to the data obtained in this period, since this will be useful to determine the effects of the pandemic in the Open High School.

For the study, a review of the available literature on the new coronavirus SARS-CoV2, named covid-19, will begin, once the theoretical information in this regard has been integrated, an analysis of the data obtained from the state information cards corresponding to the Open High School of the State of Nayarit, to determine the changes that the services provided by this department have had and the affectation they suffered due to the restrictions of the pandemic.

**Participants**

For the study, a review of the available literature on the new SARS-CoV2 coronavirus will begin, especially in the State of Nayarit, once the theoretical information in this regard has been integrated, an analysis of the data obtained from the information cards will be carried out, of the dependency, to determine...
the changes that the services provided by this department have had and the affectation they suffered due to the restrictions of the pandemic, a total of 40 information cards generated by the dependency were used. Corresponding to the services granted in the period of 2018, 2019 and 2020, which were taken to analyze the variants that exist before and during the pandemic.

**TECHNIQUE AND INSTRUMENTS**

The instruments that were used for the development of the present investigation were the records obtained from the state information cards 2018, 2019 and 2020 that the General Directorate of Baccalaureates dependent on the Undersecretary of Higher Secondary Education requests the Open High School Coordinations of all the Federative Entities, which are official documents that have a biannual presentation periodicity, it must be mentioned that only those of the Nayarit State Coordination were taken into account for the present study.

**PROCEDURE**

The information collection procedure to carry out the analysis was, in the first instance, to carry out a review of the official literature available about the new coronavirus covid-19, information about the High School, specifically the Open School of the State of Nayarit, as well as the health and labor restrictions in the education sector. Once the theoretical information in this regard was integrated, an analysis of the data obtained from the state information cards for the years 2018-2020 was carried out, to determine the changes that the services granted by this modality of baccalaureate have had and the affectation they suffered due to pandemic restrictions.

**RESULTS AND DISCUSSIONS**

Once the information was collected and the results obtained were analyzed by performing the variances and integral percentages of the data obtained in the state information cards for the years 2018, 2019 and 2020, in order to assess the situation in regarding both the main and complementary services provided by the Nayarit State Open High School, due to the covid-19 pandemic.

Analysis Description of results

It can be seen in the following figure that the numbers of students who enrolled in the 2018-2020 period show a 31% decrease for 2019 and 73% more for 2020 compared to the previous year.

The year 2018 was where the most certificates were issued to students who completed the 33 credits of the Open High School curriculum, considering a drop of 3% for 2019 and 52% for 2020, as shown in the figure 2.

The educational service that for 2019 had an increase was the request for exams. Figure 3 shows that a 47% increase was obtained and for the year of the pandemic there was a decrease in this item of 88%.

It can be seen in figure 4, that accredited exams mark a decrease of 87% for 2020, compared to 2019 where the increase was 50% compared to 2018. Thus, the decreasing main activity granted by the Open High School is also notorious. of the State of Nayarit and the negative impact that the pandemic had on this unit, on average they carried out school activities only 12% for the year 2020 with respect to the maximum obtained in previous years.

Due to the affectation of the services that the Open High School has to offer, some strategies are suggested to follow to increase the numbers that are had in the registration, application and presentation of exams, which would be reflected in all the other services.
Figure 1. *Figures of students enrolled as admission to the Open High School of the State of Nayarit 2018, 2019 and 2020*

Source: Own elaboration

Figure 2. *Certificates issued in the Open High School of the State of Nayarit years 2018, 2019 and 2020*

Source: Own elaboration
Figure 3. *Exams requested in the Open High School of the State of Nayarit years 2018, 2019 and 2020*

Source: Own elaboration

Figure 4. *Comparison of Open High School exams of the State of Nayarit years 2018, 2019 and 2020*

Source: Own elaboration
that it provides. dependency that culminate in the issuance of their certificate.

Such strategies are: in the first 15 days of each month, schedule and visit logistics to 4 City Councils of the Entity, first making an appointment with the appropriate person to disseminate and offer the services of the Open High School Coordination, make brochures, promote through social networks, radio and/or television, design advertising, offering open high school services, publicizing the advantages of this modality and inclusion in the “Benito Juárez” Universal Scholarship program.

Supported these strategies with the following actions:
• Present the services offered in the Open High School Coordination, exposing: the advantages of the modality.
• Inclusion in the “Benito Juárez” Universal Scholarship program.
• costs.
• The agreement that is formalized with the management and advisory centers, as well as the explanation of the same and the Personnel requirements that are necessary by the entity.
• Deliver brochures in strategic areas.
• Hire Spots on the Radio to publicize the services of Open High School.
• Design advertising offering open high school services and advantages and promote it through social networks.
• Arrange appointments on Radio and/or Television to promote open high school services, making known the advantages of this modality and the inclusion in the Universal Scholarship program “Benito Juárez”.

In order to disseminate and offer the 20 City Councils, 8 public and/or private entities of the and 40 public and/or private entities of the Entity, offer the services offered by the Open High School Coordination, Achieve each month to disseminate and offer to 4 City Councils of the Entity, offer the services offered by the Open High School Coordination.

**CONCLUSIONS**

It can be concluded with the data obtained that the affectation to the services is great since to comply with the peculiarities of this modality of baccalaureate, the students have to carry out the procedures and application of the physical form exams in a venue authorized by the institution. Due to the fact that this is an essential requirement, the provision of services such as advisory services was almost nil, since the presentation of exams was suspended indefinitely due to the pandemic and the students, at that time, did not find it attractive to request the service.

As it was observed, the services were increasing by an average of 45% in terms of the provision of main school services offered by the Open High School of the State of Nayarit and due to sanitary restrictions as of March 2020, school activities were suspended leaving to the students in anxiety about what would happen to their immediate school future, having only an average of 12% of school productivity in the services granted by this educational agency. This modality of baccalaureate gives students an option, which for some is the only one in which they can study, carry out or conclude secondary education studies, either to access financial improvements in their work environment or to enter an educational institution superior.

In this immediate future, adaptation to the new way of life that the pandemic has brought to humanity is definitely needed, hoping that the population is mostly vaccinated against the virus and thus reduces the danger of contagion among students and academic-administrative staff from high school.
Immediate recovery to the extent that the authorities allow it, must require security measures, well-defined health protocols to avoid contagion among the participants in this process, as well as well-defined school policies and procedures with the respective authorities, for the development of another type of process that does not require the attendance of the students at the centers where they take exams for the accreditation of their 33 credits that comprise the educational program of the Open High School of the State of Nayarit and can continue with their professional or work training.

It is worth mentioning that at the beginning of 2021, the State Coordination of Open High School made the necessary arrangements for Open High School students to have access to the Benito Juárez Universal Scholarship for Well-being, which is financial support from the Government of Mexico aimed at and students who are enrolled in high school or technical professional high school (higher secondary education) in a public school in the country, so that they can continue and complete their studies, which consists of a support of $840.00 Mexican pesos per month that is granted for 10 months, that lasts the school year, up to a maximum of 30 months as long as they continue enrolled or enrolled in the program.

It was in the month of September 2021, when a favorable response was obtained and the students were registered and in the month of February of this year 2022 they notified that 675 open high school students received scholarships. Said scholarship is expected to function as an incentive and economic means for the student to satisfactorily complete his studies, since it is important for the Federal Government to increase and maintain the high school level school curriculum.

**THANKS**

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REFERENCES


