Journal

Education

Sciences

ECORFAN-Peru

Journal Education Sciences

Definition of Journal

Scientific Objectives

Support the international scientific community in its written production Science, Technology and Innovation in the Field of Social Sciences, in Subdisciplines Psychology of education, anthropology of education, compared education, educational policy, educational administration, Education theory.

ECORFAN-Mexico, S.C. is a Scientific and Technological Company in contribution to the Human Resource training focused on the continuity in the critical analysis of International Research and is attached to CONACYT-RENIECYT number 1702902, its commitment is to disseminate research and contributions of the International Scientific Community, academic institutions, agencies and entities of the public and private sectors and contribute to the linking of researchers who carry out scientific activities, technological developments and training of specialized human resources with governments, companies and social organizations.

Encourage the interlocution of the International Scientific Community with other Study Centers in Mexico and abroad and promote a wide incorporation of academics, specialists and researchers to the publication in Science Structures of Autonomous Universities - State Public Universities - Federal IES - Polytechnic Universities - Technological Universities - Federal Technological Institutes - Normal Schools - Decentralized Technological Institutes - Intercultural Universities - S & T Councils - CONACYT Research Centers.

Scope, Coverage and Audience

Journal Education Sciences is a Journal edited by ECORFAN-Mexico, S.C. in its Holding with repository in Republic of Peru, is a scientific publication arbitrated and indexed with semester periods. It supports a wide range of contents that are evaluated by academic peers by the Double-Blind method, around subjects related to the theory and practice of Psychology of education, anthropology of education, compared education, educational policy, educational administration, Education theory with diverse approaches and perspectives , That contribute to the diffusion of the development of Science Technology and Innovation that allow the arguments related to the decision making and influence in the formulation of international policies in the Field of Social Sciences. The editorial horizon of ECORFAN-Mexico® extends beyond the academy and integrates other segments of research and analysis outside the scope, as long as they meet the requirements of rigorous argumentative and scientific, as well as addressing issues of general and current interest of the International Scientific Society.

Arbitration Committee

Assignment of Rights

The sending of an Article to Journal Education Sciences emanates the commitment of the author not to submit it simultaneously to the consideration of other series publications for it must complement the Originality Format for its Article.

The authors sign the Authorization Format for their Article to be disseminated by means that ECORFAN-Mexico, S.C. In its Holding Republic of Peru considers pertinent for disclosure and diffusion of its Article its Rights of Work.

Declaration of Authorship

Indicate the Name of Author and Coauthors at most in the participation of the Article and indicate in extensive the Institutional Affiliation indicating the Department.

Identify the Name of Author and Coauthors at most with the CVU Scholarship Number-PNPC or SNI-CONACYT- Indicating the Researcher Level and their Google Scholar Profile to verify their Citation Level and H index.

Identify the Name of Author and Coauthors at most in the Science and Technology Profiles widely accepted by the International Scientific Community ORC ID - Researcher ID Thomson - arXiv Author ID - PubMed Author ID - Open ID respectively.

Indicate the contact for correspondence to the Author (Mail and Telephone) and indicate the Researcher who contributes as the first Author of the Article.

Plagiarism Detection

All Articles will be tested by plagiarism software PLAGSCAN if a plagiarism level is detected Positive will not be sent to arbitration and will be rescinded of the reception of the Article notifying the Authors responsible, claiming that academic plagiarism is criminalized in the Penal Code.

Arbitration Process

All Articles will be evaluated by academic peers by the Double-Blind method, the Arbitration Approval is a requirement for the Editorial Board to make a final decision that will be final in all cases. MARVID® is a derivative brand of ECORFAN® specialized in providing the expert evaluators all of them with Doctorate degree and distinction of International Researchers in the respective Councils of Science and Technology the counterpart of CONACYT for the chapters of America-Europe-Asia- Africa and Oceania. The identification of the authorship should only appear on a first removable page, in order to ensure that the Arbitration process is anonymous and covers the following stages: Identification of the Research Journal with its author occupation rate - Identification of Authors and Coauthors - Detection of plagiarism PLAGSCAN - Review of Formats of Authorization and Originality-Allocation to the Editorial Board-Allocation of the pair of Expert Arbitrators-Notification of Arbitration -Declaration of observations to the Author-Verification of Article Modified for Editing-Publication.

Instructions for Scientific, Technological and Innovation Publication

Knowledge Area

The works must be unpublished and refer to topics of Psychology of education, anthropology of education, compared education, educational policy, educational administration, Education theory and other topics related to Social Sciences.

Presentation of Content

In the first article we present, *Virtual education, an engine to increase learning in the pandemic*, by MONCADA-RODRÍGUEZ, Gloria Rebeca, VILLARREAL-SOTO, Blanca Margarita, ESPERICUETA-MEDINA, Marta Nieves and GONZÁLEZ-CEPEDA, María Cristina, with adscription in Universidad Autónoma de Coahuila, as the next article we present, *Teachers in training; post-pandemic challenges in the professional practice*, by CHÁVEZ-ALBA, Romelia, ORDÓÑEZ-SUÁREZ, Teresa, CHÁVEZ-ALBA, Enied Cuitláhuac and MARTÍNEZ-ROCHA, Diana Itzel, with adscription in Escuela Normal Superior Federal de Aguascalientes "Profr. José Santos Valdés" and Escuela Normal de Atlacomulco "Profesora Evangelina alcántara Díaz", as the next article we present, *Follow-up of graduates, an institutional program that should be the hallmark of a Public Teacher Training College in the State of Mexico*, by MENDOZA-GONZÁLEZ, Nancy, FUENTES-FAVILA, Luis Macario, MOLINA-VÁZQUEZ, Gabriel and ORDÓÑEZ-SUÁREZ, Teresa, with adscription in Escuela Normal de Atlacomulco "Profesora Evangelina alcántara Díaz", as the next article we present, *Assertiveness, a key element to design conflict management strategies in students at Universidad Tecnológica de León*, by PADILLA-GUTIÉRREZ, Luz Aurora, HERNÁNDEZ-CASTILLO, Adolfo, ARREDONDO-MUÑOZCANO, Ana María del Carmen and GONZÁLEZ-ARREDONDO, Liliana, with adscription in Technological University of León.

Content

Virtual education, an engine to increase learning in the pandemic

La educación virtual, un motor para aumentar el aprendizaje en la pandemia

MONCADA-RODRÍGUEZ, Gloria Rebeca†*, VILLARREAL-SOTO, Blanca Margarita, ESPERICUETA-MEDINA, Marta Nieves and GONZÁLEZ-CEPEDA, María Cristina

Universidad Autónoma de Coahuila, Faculty of Science, Education and Humanities

ID 1ˢᵗ Author: *Gloria Rebeca, Moncada-Rodríguez* / **ORC ID:** 0000-0003-2636-3646, **Researcher ID Thomson:** AGO-1766-2022, **CVU CONACYT ID:** 1196981

ID 1ˢᵗ Co-author: *Blanca Margarita, Villarreal-Soto* / **ORC ID:** 0000-0001-9314-8001, **Researcher ID Thomson:** T-2357-2018, **CVU CONACYT ID:** 947979

ID 2ⁿᵈ Co-author: *Marta Nieves, Espericueta-Medina* / **ORC ID:** 0000-0002-4924-7632, **Researcher ID Thomson:** T-1500-2018, **arXiv Author ID:** Espericueta2018, **CVU CONACYT ID:** 372705

ID 3ʳᵈ Co-author: *María Cristina, González-Cepeda* / **ORC ID:** 0000-0003-0676-2412

Abstract

The objective of this article is to know how virtual education intervenes in the learning process of students in Technical Secondary School No. 4 vs. General Secondary School No. 11 during the pandemic. The research that was carried out is of a comparative and differential type since two populations will be analyzed to know the learning process in virtual education; it is also preliminary since it will only have one moment in the validation of the external data. The instrument had 83 variables on a decimal ratio scale and 6 general data items. The statistical treatment was through Statistica 7, with the purto obtain confidence in the information. The main results of the research highlight that carrying out a practice of the topics seen enhances the learning process in the subjects. The research concludes that the most suitable education for men is the virtual one since they generate a greater type of interrelationships, abilities, skills, communication, and social situations that favor a quality education. It is proposed to carry out a course focused on virtual education to learn about technological tools.

Virtual education, Learning, Pandemic

Resumen

El objetivo de este artículo es conocer cómo interviene la educación virtual en el proceso de aprendizaje de los alumnos de la Secundaria Técnica No. 4 vs. Secundaria General No. 11 durante la pandemia. La investigación que se realizó es de tipo comparativo y diferencial ya que se analizarán dos poblaciones para conocer el proceso de aprendizaje en la educación virtual; también es preliminar ya que solo tendrá un momento en la validación de los datos externos. El instrumento contó con 83 variables en escala de razón decimal y 6 ítems de datos generales. El tratamiento estadístico fue a través de Statistica 7, con el propósito de obtener confianza en la información. Los principales resultados de la investigación destacan que la realización de una práctica de los temas vistos potencia el proceso de aprendizaje en las asignaturas. La investigación concluye que la educación más adecuada para los hombres es la virtual ya que generan un mayor tipo de interrelaciones, habilidades, destrezas, comunicación y situaciones sociales que favorecen una educación de calidad. Se propone realizar un curso enfocado a la educación virtual para conocer las herramientas tecnológicas.

Educación virtual, Aprendizaje, Pandemia

* Author Correspondence (E-mail: gmoncada@uadec.edu.mx)
† Researcher contributing as first author.

Introduction

Virtual education is a phenomenon that has favored education, because in this modality students can learn from different spaces, hence the question of How does virtual education intervene in the learning process of students of Technical Secondary No. 4 and General Secondary No. 11 during the pandemic?

The research topic focuses on virtual education because it is a problem that is currently being presented, in contrast to the learning process because we want to analyze the levels of knowledge that students have acquired in times of pandemic.

With this analysis, it is intended that adolescents can detect if they have really acquired learning during their virtual education process during the pandemic, in order to create a solution to this problem.

The main beneficiaries of this research will be the students of Technical Secondary No. 4 and General Secondary No. 11 since it is intended to know how their learning process has been during the pandemic; However, the population will benefit since students will be able to measure how much they have learned in virtual education, finally, society as a whole will benefit from having elements that favor virtual education.

The sections that will be addressed throughout this article focus on the following: the theoretical perspective, which consists of presenting a review of the main authors who provide their theoretical contributions to the phenomenon of study, and in this way have a broader panorama when investigating; the methodology to be developed, in which the type of research is exposed, the sample with which it was worked and the strategic line on which the choice of the topics to be studied was based; the results, in which the most significant data derived from the five statistical levels (frequencies and percentages, characterization, correlation, comparison and integration) are exhibited; the conclusions, where a detailed and summarized synthesis of the contributions provided by the research is made and finally the bibliographic references.

Theoretical perspective

Throughout history it has been detected that virtuality is a phenomenon that has favored education. In the field of virtual education, you can learn from different places and platforms because in this modality it is not necessary for a group of people to attend a school.

Hernández (2022) mentions that there is a significant relationship between the perception of students and virtual education during their training process. As well as that this relationship is positive during the COVID-19 pandemic.

Arteaga et al. (2021) highlight that education in virtual classrooms is conceptualized as an academic modality that makes use of technological means, in this way it gives rise to new ways of perceiving the educational process generating significant learning, radically replacing face-to-face learning scenarios, having to look for different mechanisms to achieve a close interaction between the educational figure and the students.

Among the innovations brought by virtuality is the role played by the teacher, so Atarama (2020), expresses that, within virtual education, the role of the teacher contemplates the planning and accompaniment of the student's learning process to ensure that the objectives of the subject are met. In this perspective, the teacher must be able to facilitate and benefit the use of the media in which students interact, such as social networks, digital platforms, collaborative environments, network activities for educational purposes. Knowing how to implement this type of strategy is right for the educational environment. This author refers to the strategies that the teacher must implement to ensure that knowledge is acquired, taking into account the technological resources so that it is of quality.

As stated by Bravo and Magis (2020), the study of virtuality becomes increasingly relevant, because online education in 2020 is an unprecedented fact since it marks a before and after in pedagogical practices and in all current educational systems globally, since it has become evident there are great social inequalities, cultural and economic in more than 180 countries that have been victims of the COVID-19 pandemic. He speaks in relation to the fact that virtual education is a new event that has no precedent which marked a pattern in the pedagogical fact, and therefore mentions the inequalities that were caused in the countries as a result of the pandemic, so the school has had to adapt to this situation.

Virtual education is related to the learning process, considering that this is the way in which students follow methodological processes in order to acquire knowledge.

Methodology to be developed

The research that is being carried out is of a comparative and differential type since two populations will be analyzed with to know the learning process in virtual education; It is perimental since it will have a single moment in the validation of external data.

Therefore, two populations were selected with differences in their operating characteristics, which will be 50 students from Technical High School No. 4 and 50 students from General Secondary No. 11, since it is expected to know the number of students who have acquired learning in their virtual education. The concordance refers to the fact that both are at the basic level, however, one is technical and the other general, the population has the same age range.

Regarding the processing of the relative frequencies that were obtained, the instrument was processed through the Statistic 7 program, with the purpose of obtaining validity and confidence in the information.

Results

In order to provide a reliable explanation and scientific rigor to the research axes which corresponds to the topic virtual education and the contrast learning process, the relative frequencies were processed, which were collected through the online instrument, using the programs Statistica 7 and Excel in order to explain the phenomenon statistically through the levels of frequencies and percentages, characterization, correlation, comparison and integration.

Frequencies and Percentages

The processing of the section of frequencies and percentages aims to characterize the study population so that once the levels of confidence in the phenomenon are reached, the information can be extrapolated to other populations with equal characteristics, which implies the generalization of data. At this level we operate with signalitic variables which correspond to:

Age

Table 1 shows that thesmallest part of the participating population is 16 years old, which is reflected in the fact that its frequency is 2, which is equivalent to 1%, however, most of it is represented by 14 years, denoting a frequency of 135 equivalent to 80% of the subjects. It is inferred that students with 14 years are the most represented, so the information can be extrapolated to other populations with this characteristic as long as the variables of the phenomenon present the levels of confidence.

Age	Frequency	Percentage
14	135	80%
15	31	19%
16	2	1%
Total	168	100%

Table 1 Statistical behavior of frequencies and percentages of the age variable, *(2022)*
Source: Own elaboration

Gender

With regard to Table 2, it is observed that the smallest part of the group surveyed are men, which is reflected in the fact that their frequency is 73, which is equivalent to 45.5%, however, most of them are represented by women, corresponding to a frequency of 95, equivalent to 56.5% of the population. It is inferred that the female gender is the one that is mostly represented.

Gender	Frequency	Percentage
Female	95	56.5%
Male	73	43.5%
Total	168	100%

Table 2 Statistical behavior of frequencies and percentages of the gender variable *(2022)*
Source: Own elaboration

School adaptation

Table 3 shows that the smallest part of the group surveyed did not adapt to virtual education, which is reflected in the fact that its frequency is 64, which corresponds to 38%, however, most of it is represented by those who did adapt to virtual education with a frequency of 104, which is equivalent to 62% of the population. It is inferred that students who adaptedto virtual education are predominantly in research.

Education	Frequency	Percentage
No	64	38%
Yes	104	62%
Total	168	100%

Table 3 Statistical behavior of frequencies and percentages of the school adaptation variable (2022)
Source: Own elaboration

Characterization

Table 4 presents the behavior of the mean, which reads that the variables found in the low values (0,1,2,3), technological resources (X = 3.93), adaptation (X = 2.92), change (X = 3.92), virtual classroom (X = 1.89), model (X = 3.45), school (X = 1.96) and extracurricular activities (X = 1.63). It is inferred that the pandemic has brought an educational lag, therefore, virtual environments do not favor meaningful learning processes.

Variables	X
Technological resources	3.93
Adaptation	2.92
Change	3.92
Virtual classroom	1.89
Model	3.45
Escuela	1.96
Extracurricular activities	1.63

Table 4 Average statistical behavior *(2022)*
Source: Own elaboration

Correlation

Next, the correlation readings that were significant are presented taking in to account a probability of p = .000001 with a correlational level of r = 0.31.

Correlation of the Oportunidades variable

Table 5 shows that when teachers provide opportunities to students, they better understand the educational programs (r=0.49) that were implemented during the pandemic to favor their training (r=0.45) and this has increased motivation in students (r=0.47). It is inferred that educational programs potentiate the opportunities for virtual education.

Correlation Opportunities	r-value
Educational Programs	0.49
Motivation	0.47
Formation	0.45

Table 5 Correlational behavior of the oportunidades variable *(2022)*
Source: Own elaboration

Correlation of the interaction variable

Table 6 shows that interaction is a key factor in group work (r=0.46) in which participation (r=0.44) and collaboration of all students (r=0.47) must be implemented. It is inferred that when students are active in their education, this increases their knowledge.

Interaction correlation	r-value
Group work	0.46
Collaboration	0.47
Participation	0.44

Table 6 Correlational behavior of the interaction variable (2022)
Source: Own elaboration

MONCADA-RODRÍGUEZ, Gloria Rebeca, VILLARREAL-SOTO, Blanca Margarita, ESPERICUETA-MEDINA, Marta Nieves and GONZÁLEZ-CEPEDA, María Cristina. Virtual education, an engine to increase learning in the pandemic. Journal Education Sciences. 2022

Correlation of the variable methodologies

Table 7 shows that the methodologies implemented by teachers are linked to self-regulation by students (r=0.46), in which equity is implemented (r=0.47) at the moment in which the teacher motivates them to continue learning (r=0.48). It is inferred that motivation potentiates the method that the teacher implements for learning.

Correlation methodologies	r-value
Self-regulation	0.46
Motivation	0.48
Equity	0.47

Table 7 Correlational behavior of the variable methodologies *(2022)*
Source: Own elaboration

Correlation of the collaboration variable

Table 8 analyzes that during the pandemic collaboration between students was represented by the realization of group work (r=0.56) in various subjects (r=0.43) and this has raised the levels of self-management related to participation in decision-making in the classroom (r=0.50). It is inferred that group work potentiates collaboration in virtual education.

Correlation ollaboration	r-value
Group work	0.56
Self-management	0.50
Matters	0.43

Table 8 Correlational behavior of the collaboration variable *(2022)*
Source: Own elaboration

Correlation of the practical variable

With regard to Table 9, it is explored that when students perform exercises to reinforce a topic as a practice they develop their critical analysis (r = 0.42), in this way they improve their communication (r = 0.43) in the various subjects (r = 0.48) in order to present the needs to the teacher (r = 0.46). It is inferred that carrying out a practice of the topics seen potentiates the learning process in the subjects.

Practical correlation	r-value
Critical analysis	0.42
Communication	0.43
Needs	0.46
Matters	0.48

Table 9 Correlative behavior of the practical variable *(2022)*
Source: Own elaboration

Correlation of the communication variable

Table 10 shows that communication in virtual classes is a factor of the participation of students (r=0.64) in the different subjects (r=0.50) and this has favored self-management in relation to students participating in the decisions made in the classroom (r=0.56) to meet their needs (r=0.59). It is inferred that the participation of students potentiates the learning processes.

Communication correlation	r-value
Participation	0.64
Matters	0.50
Needs	0.59
Self-management	0.56

Table 10 Correlational behavior of the communication variable *(2022)*
Source: Own elaboration

Comparison

At the bottom, comparisons are presented to observe the concordances and differences using the student t statistic of two groups in the significate variables of gender and school.

Comparison of the gender variable

In order to find the significant differences between the variable Gender and the variables that correspond to the phenomenon of study, a student's t test was performed for independent samples in the Statistica 7 program, with a probability of 0.05, in order to accept or reject the null hypothesis, with a sample of 168 students with a difference in the variable Gender in male and female, All of the above can be seen reflected in Table 11.

| Variables | X | | T-Value | | | | |
	M	F		Mexico City	p	p
Interrelation	5.7	4.59	2.24	166	0.03	0.78
Students	5.9	5.14	1.98	166	0.05	0.27
Social environment	5.8	4.56	2.62	166	0.01	0.50
Skills	6.23	4.85	2.74	166	0.01	0.34
Skills	5.34	4.16	2.28	166	0.02	0.96
Communication	6.25	5.18	2.05	166	0.04	0.37

Table 11 Comparative behavior of the gender-independent variable (2022)
Source: Own elaboration

As shown in Table 11, the interrelation variable reads that women are the ones who almost do not communicate through virtual education (x=4.59) while men are the ones who present greater communication in this modality (x=5.73). It is inferred that the most comfortable in this type of education are men since they are the ones who present more ease in their interrelation.

In the student variable, it is observed that women have presented greater difficulty in entering virtual classes (x=5.14) while men are facilitated to attend meetings (x=5.97). It is inferred that men have been more aware of distance classes for their training.

In the variable social environment, it is read that women presented greater problems when functioning in society during the pandemic (x=4.56), while men have developed more easily (x=5.89). It reads that virtual education has favored men in their social development.

In the variables skills it is observed that women have found it difficult to express themselves (x = 4.85), on the contrary, men have been more expressive (x = 6.23). It is inferred that during the pandemic men developed their ability to express themselves in a greater way.

The skills variable reads that women need to be more focused on the subject in order to learn (x=4.16) while men can learn with distractions (x=5.34). It is inferred that men have the facility to learn with noise and this facilitates their virtual education. In the communication variableit is observed that generally women do not present their doubts to the teacher (x = 5.18) on the contrary, men ask the teacher their concerns (x = 6.25). It is inferred that men feel more secure when presenting their doubts in virtual education.

It is generally inferred that the most suitable education for men is virtual education since they generate a greater type of interrelationships, skills, abilities, communication and social situations that favor quality education.

Comparison of the school variable

In order to find the significant differences between the School variable and the variables that correspond to the study phenomenon, a student's t-test was performed for independent samples, which is shown in Table 12. It should be noted that we worked with a probability of 0.001, in order to accept or reject the null hypothesis, with a sample of 168 students from General Secondary No. 11 and Technical High School No. 4.

| Variables | X | | | | |
	General No. 11	Technique N°4	Mexico City	p	p
Session	9.19	3.89	166	0.00	0.00
Formation	7.76	6.12	166	0.00	0.14
Continuous	8.87	7.71	166	0.00	0.00

Table 12 Comparative behavior of the school independent variable (2022)
Source: Own elaboration

The session variable reads that in technical secondary school No. 4 students did not attend virtual classes daily (x = 3.89), while in general secondary No. 11, students adapted to the distance modality (x = 9.19). It is inferred that in general secondary school No. 11 there will be less educational lag because students continued to learn day by day.

In the training variable it is observed that the students of the technical secondary N°4 are not satisfied with the education they are receiving at a distance (x=6.12) while the students of the general secondary N°11 if they are satisfied with their education (x=7.76). It is inferred that the teachers of general secondary school No. 11 implemented the necessary strategies to transmit knowledge. In the continuous variable, it is read that the students of technical secondary school N°4 have presented periods of time where their education has been interrupted (x=7.71), while in general secondary N°11 the students have taken an education without interruptions during the pandemic (x=8.87). It is inferred that general secondary school No. 11 has implemented its curriculum properly.

It is generally inferred that the general secondary No. 11 has shown greater interest in students having adequate training, so they have implemented the necessary strategies so that their students do not show a greater educational lag, likewise, the students have not had interruptions in their learning process which will favor their education.

Integrative

This segment presents the integration analysis based on the factorial statistic, integrating the 168 students and 86 variables that make up the research of the parametric statistics of the study phenomenon; with a main method R^2= multiple communities with a normalized Varimax rotation, a sigmatic cut Eigenvalue of 1, a level of p=. 000000001 and an r=.46.

Intrafactorial Analysis

Factor 1: Educational aspects

Table 13 shows the first factor that corresponds to the teacher's responsibility to motivate (exp=0.64) and guide students in the learning process (exp=0.80) as well as to make innovations in the contents (exp=0.66) so that these are important topics (exp=0.74) that cause interest in students (exp=0.47), since in this way they will better understand the explanations (exp=0.49), however, the teacher must be flexible (exp=0.68) in relation to returning to those topics that are not clear to students (exp=0.67) so that there is greater participation by students (exp=0.48) in addition to having the opportunity to improve a task or activity (exp=0.57), For this, the teacher presents the way he will have to work during the course (exp=0.71) and the way to evaluate (exp=0.67) following a teaching methodology (exp=0.60) so that students are satisfied with the education they are receiving (exp=0.47) and there is coverage (exp=0.52) in an equitable manner (exp=0.62). It is inferred that the learning process during the pandemic depends largely on the actions implemented by the teacher.

Factor 1	Factorial load
Motivation	0.64
Accompaniment	0.80
Innovation	0.66
Pertinence	0.74
Contents	0.47
Pedagogical	0.49
Flexibility	0.68
Orientation	0.67
Inclusion	0.48
Opportunities	0.57
Educational program	0.71
Planning	0.67
Methodologies	0.60
Formation	0.47
Coverage	0.52
Equity	0.62

Table 13 Intrafactorial statistical behavior of educational aspects (2022)
Source: Own elaboration

Factor 2: Working Links

Table 14 shows that if students live together (exp=0.81) and talk to each other (exp=0.77), most become friends (exp=0.83) and thus provide help when they need it (exp=0.59), which favors collaboration (exp=0.56) and participation in group work (exp=0.49), as well as intervening in classroom decisions (exp=0.53), With this, students better express their ideas (exp=0.61) and present their doubts to the teacher (exp=0.47), this develops the ability to express themselves (exp=0.57) and function in society (exp=0.60). It is inferred that the links established between students favor their learning process.

Factor 2	Factorial Load
Interaction	0.81
Interrelation	0.77
Self-management	0.53
Group work	0.49
Collaboration	0.56
Communication	0.47
Skills	0.57
Social environment	0.60
Support	0.59
Ideas	0.61
Links	0.83

Table 14 Intrafactorial statistical behavior of work links (2022)
Source: Own elaboration

Factor 3: School factors

In relation to table 15, it is read that students have a quality education (exp=0.66), because they are learning (exp=0.63) and acquiring adequate knowledge during the pandemic (exp=0.60), in this way students meet their educational objectives (exp=0.53) and are satisfied with their education (exp=0.61). It is inferred that receiving a quality education potentiates the learning process during the pandemic.

Factor 3	Factorial load
Quality	0.66
Knowledge	0.60
Learn	0.63
Formation	0.61
Objectives	0.53

Table 15 Intrafactorial statistical behavior of school factors (2022)
Source: Own elaboration

Factor 4: Educational exploration

Regarding Table 16, it is explored that when students are satisfied with their education (Exp=0.68) they follow the instructions given by the teacher (Exp=0.61), perform their activities in the established time (Exp=0.59), strive to do (Exp=0.54) and fulfill their tasks during the pandemic (Exp= 0.63), investigate in various sources to clarify their doubts (Exp=0.69) and understand a topic (Exp=0.57) with this they build their own definitions (Exp=0.50) and use critical analysis in classes (Exp=0.53), these actions have a purpose (Exp=0.57), related to the understanding of subjects (Exp=0.59) and have fundamental elements when studying for an exam (Exp=0.49). It is inferred that investigating in various parts broadens the knowledge acquired by students and favors their learning process.

Factor 4	Factorial load
Responsibility	0.63
Self-regulation	0.57
Instruction	0.61
I am a student	0.49
Matters	0.59
Activities	0.56
Research	0.69
Critical analysis	0.53
Formation	0.68
Constructivism	0.50
Effort	0.54
Explore	0.57

Table 16 Intrafactorial statistical behavior of educational exploration *(2022)*
Source: Own elaboration

Factor 5: School tools

At the bottom is table 17 where it is highlighted that during the pandemic students have handled computer applications more easily (exp=0.61), so with this means it is easier for them (exp=0.74) to enter virtual classes (exp=0.48), perform their tasks (exp=0.71) and save them on digital platforms (exp=0.54). It is inferred that technological resources have played a fundamental role in the distance modality.

Factor 5	Factorial load
Technological resources	0.71
Tools	0.74
Class	0.48
Digital platforms	0.54
Software	0.61

Table 17 Intrafactorial statistical behavior of school tools (2022)
Source: Own elaboration

Conclusions

Subsequently, the conclusions are presented through intervention proposals for the research axes with the aim of potentiating excellence at the secondary level. For this reason, it was of special importance that the data processing be carried out with a basis in parametric statistics, in this way to achieve the criteria of confidence and validity in the results. Therefore, the contributions to generate a change for the benefit of the school community to improve the teaching-learning processes are observed below:

- Take the data to a congress where this topic can be exposed, as well as its results.

- The realization of a course focused on virtual education where it implies knowing what is related to technological tools.

- Publicize the results in general secondary school No. 11 and technical secondary No. 4 so that both can know their areas of opportunity and thus offer a better quality education.

- Disseminate the results through social networks such as Facebook so that society in general knows more about virtual education.

- Publicize the results to various high schools in the state so that the faculty can identify areas of opportunity for their virtual classes.

- Take the results to the state congress to discuss the importance of virtual education and establish an educational policy that favors the realization of strategies to improve learning processes in the distance modality.

- Establish an intervention model focused on distance education as a factor of potentiation in educational quality.

- Establish dynamics in schools so that students can give their opinion related to the implementation of the distance modality.

References

Arteaga Flores, R., Mero Mero, R., Palacios Briones, N., & Cruz Mera, R. (2021). Virtuality and its Impact on the Educational Process in the Face of Covid-19 in Ecuador. FIPCAEC: Revista Científica Ciencias Económicas y Empresariales 30(2), pp. 320-335. https://www.fipcaec.com/index.php/fipcaec/article/view/484

Atarama, T. (2020). Virtual education in times of pandemic. University of Piura. https://www.udep.edu.pe/hoy/2020/04/la-educacion-virtual-en-tiempos-de-pandemia/

Bravo, E., & Magis, C. (2020). The global response to the COVID-19 epidemic: the first three months. Bulletin on COVID-19 Public Health and Epidemiology. https://dsp.facmed.unam.mx/wp-content/uploads/2022/03/COVID-19-No.1-03-La-respuesta-mundial-a-la-epidemia-del-COVID-19-los-primeros-tres-meses.pdf

Excel (Version 2016). (2016). [Office 365 package software]. Microsoft.

Hernández Santos Ruth (2022) Perspective of apprentices and virtual education during COVID-19 in the health network of the national learning service (SENA), regional Bolívar - Colombia, 2021, Master's Thesis of the Universidad Peruana Unión, http://hdl.handle.net/20.500.12840/5408

Teachers in training; post-pandemic challenges in the professional practice

Docentes en formación; desafíos de la práctica profesional en la postpandemia

CHÁVEZ-ALBA, Romelia†*, ORDÓÑEZ-SUÁREZ, Teresa, CHÁVEZ-ALBA, Enied Cuitláhuac†* and MARTÍNEZ-ROCHA, Diana Itzel

Escuela Normal Superior Federal de Aguascalientes "Profr. José Santos Valdés"
Escuela Normal de Atlacomulco "Profesora Evangelina alcántara Díaz"

ID 1st Author: *Romelia, Chávez-Alba* / **CVU CONACYT ID:** 587323

ID 1st Co-author: *Teresa, Ordóñez-Suárez* / **ORC ID:** 0000-0002-2137-3485, **CVU CONACYT ID:** 680401

ID 2nd Co-author: *Enied Cuitláhuac, Chávez-Alba* / **ORC ID:** 0000-0001-7847-1839

ID 3rd Co-author: *Diana Itzel, Martínez-Rocha* / **ORC ID:** 0000-0002-5975-4128

Abstract

This work is significant because it systematizes the experiences of 20 students from the Normal in the first professional teaching practice journey, developed in the 8th semester of their teaching training. For its elaboration, the action research method was considered, whose phases and methodological operations were nourished with individually and collective contributions by the secondary school. Those inputs were compiled during the implementation of the programmed didactic situations, taking as a reference for its categorization the dimensions of teaching practice. Indicated by Fierro, Fortuol and Rosas (1999), by considering that teaching practice is a professional activity that involves a diverse and complex network of relationships between people, the educational relationship with students is, the fundamental link around which other relationships are established, when carried out within a social, economic, political and cultural context that influences them, determining demands and challenges, especially at this time, when the coronavirus pandemic SARS-CO-V$_2$, has caused diverse dynamics and moods that significantly impacted in the development of teaching and learning processes.

Professional teaching practice, Reflective teaching, Dimensions, Action research

Resumen

Este trabajo resulta significativo porque en él se sistematizan las experiencias vividas por 20 estudiantes normalistas en la primera jornada de práctica profesional docente desarrollada en el 8vo semestre de su formación. Para su elaboración se consideró el método de la investigación acción, cuyas fases y operaciones metodológicas fueron alimentadas con insumos que de manera individual y por escuela secundaria, se compilaron durante la implementación de las situaciones didácticas programadas, tomando como referencia para su categorización las dimensiones de la práctica docente, señaladas por Fierro, Fortuol y Rosas (1999), por considerar que la práctica docente es una actividad profesional que involucra una diversa y compleja trama de relaciones entre personas, siendo la relación educativa con los alumnos el vínculo fundamental alrededor del cual se establecen las otras al realizarse dentro de un contexto social, económico, político y cultural que la influye, determinando demandas y desafíos, sobre todo en este momento, cuando la pandemia del virus del SARS-CO-V2, ha provocado dinámicas diversas y estados de ánimo que impactan de manera significativa en el desarrollo de los procesos de enseñanza y de aprendizaje.

Practica profesional docente, Enseñanza reflexiva, Dimensiones, Investigación acción

* Author Correspondence (E-mail: gmoncada@uadec.edu.mx)
† Researcher contributing as first author.

Introduction

Problem statement

Students in the 8th semester of the Bachelor's Degree in Teaching and Learning Spanish in Secondary School (LEAEES), are still developing the competences explicit in the graduate profile, especially those that refer to the professional and disciplinary field, in this sense the course "Service Learning", offers them multiple opportunities to achieve it, as long as they permanently deploy the attitudes suggested by Dewey (quoted by Liston, D. and Zeichner, 1993), for a reflective teaching; the first one referred to intellectual openness, that active desire to attend to more than one point of view, to pay attention to different possibilities and alternative, alternative, alternative and reflective teaching. and Zeichner, 1993), for reflective teaching; the first refers to intellectual openness, that active desire to attend to more than one point of view, to pay attention to different possibilities and alternatives, to ask themselves recurrently why they do what they do in class. The second refers to responsibility, which involves careful consideration of the consequences of the action they take, and the last, sincerity towards themselves and towards what the profession demands of them in real terms.

In this sense, the documentation of the experience lived by 20 students was carried out through inputs that were recovered both individually and by the secondary school, during the development of the professional practice days in the post-pandemic of SARS-CO-V$_2$, because it is certain that these exercises will help them to develop the attitudes of reflective teaching, focusing their attention both on their own professional practice, and on the social conditions in which it develops and address the critical factors that are specific to their role.

Theoretical/referential framework

In this experience, the concept of teaching practice set out by Fierro, Fortuol and Rosas (1999), which alludes to a social, objective and intentional praxis, loaded with meanings, actions and knowledge, is emphasised as a fundamental reference point, which enables the development of teaching and learning processes in which teachers and students participate fundamentally in their role as subjects who intervene and interact, without leaving out other agents involved such as educational authorities, parents, curricular, political, institutional, administrative and normative elements.

Reference is also made to the concept of good teaching practices (Gazzo, 2020), understood as the set of actions carried out by the teacher to promote the learning of his or her students, to train them integrally and to favour complex cognitive processes. These good practices can become the main mechanisms that an education system has to achieve its goals.

The position of De Lella (1999, cited by García Cabrero, et al, 2008), by conceiving teaching practice as the action that the teacher carries out in the classroom[1], especially referring to the process of teaching in order to provide students with the expected learning in accordance with the objectives and contents established in the curriculum, with the same premise that teaching is an activity carried out by a specialist who has knowledge of the disciplines he/she teaches, of his/her students and their learning processes, as well as of didactics, of the contexts, needs and conditions experienced by his/her students.

The fundamental referents of the study are the professional and disciplinary competences explicit in the graduate profile of the LEAEES, (SEP, 2018), the former referring to the type of knowledge, skills, attitudes and values necessary to exercise the teaching profession at the different educational levels,

---

[1] It should be understood that, in post-pandemic times, when we speak of the classroom we are referring not only to the physical space in which the teaching and learning processes could take place, but also to the virtual spaces that are part of school life.

The first ones refer to the type of knowledge, skills, attitudes and values required to exercise the teaching profession at different educational levels, delimited in the psycho-pedagogical, socio-educational and professional fields, while the second ones highlight the type of knowledge that each teacher needs to acquire in order to deal with the contents of the curriculum, its advances in the field of science, pedagogy and its didactics in the fields of academic training. At the same time, they define in a determined way the theoretical, heuristic and axiological knowledge proper to the speciality, discipline or field of attention in which the students will specialise.

In the specific case of the degree in Teaching and Learning Spanish, the subject of this study. The graduate profile states that students will use their knowledge of Spanish and its didactics to design learning situations according to the characteristics and contexts of the students with whom they carry out their professional practice, without losing sight of the didactic and pedagogical approach on which the teaching and learning of Mother Tongue (Spanish) in secondary school is based, In addition, using the Social Practices of Language (SLP) as the vehicle that will enable the achievement of the expected learning and the development of communicative skills, assuming the evaluation as a tool that allows monitoring the learning processes and its evolution as a future teacher. In this sense, Molini, J., & Sardi, M. G. (2022, p. 27) point out that "When evaluation is included in the deployment of the didactic proposal, it becomes formative, because it makes valuable contributions both for the teacher -who can readjust his or her teaching proposal- and for the students -who become aware of their learning".

It also requires the ability to manage collaborative and inclusive learning environments to foster the comprehensive development of students from the subject they teach, innovate in their teaching practice, act with civic, ethical and legal values and principles inherent to their social responsibility and their professional work with an intercultural and humanist perspective.

It also establishes that in their performance they must use their mother tongue appropriately and responsibly in order to be competent users, work to acquire mastery of the units of linguistic study that allows them to encourage reflection on the language in the students they teach. They must also develop the ability to organise thought, understand and produce oral and written discourse specific to the different SLPs, open up spaces to promote aesthetic appreciation and literary creation in the school community and in their environment, thus broadening their socio-cultural horizons and implement various projects to recognise, value and make ethical use of the linguistic and literary riches of their environment.

Methodology

There were several reasons why the action research method was chosen to systematise the experience. The first of these is because it is considered to be an instrument that can generate social change and educational knowledge about the social and/or educational reality in which future teachers develop, giving them autonomy and power over their professional practice and the factors underlying it; it is participatory, following an introspective spiral; it is collaborative, creating self-critical communities of people who participate and collaborate in all phases of the research process; it is a systematic learning process, it induces theorising about and tests practice, and it involves recording, collecting, analysing one's own judgements, reactions and impressions of what is happening, among other processes, which can lead the students participating in the process and the teacher trainer to become researchers of their practice.

The process through which the experience was developed considered four phases in which the methodological operations described below were carried out:

Phases	Activities	Times	Methodological operations
Planning	Development of didactic situations	01 to 11 February 2022	Retrieve LSPs to be carried out with secondary school students.
Implementation	Development of didactic situations with secondary school students	14 February to 11 March 2022	Retrieve characteristics of the groups of students
Monitoring	Data retrieval		Understanding of contents in which the expected learning is broken down.
Reflection	Data analysis	14 to 13 April 2022	Design of strategies, materials and resources to develop the didactic situations and evaluate their results.

Table 1 Phases and methodological operations of the research
Source: Own elaboration based on the contributions of Latorre, A. (2005)

Development, discussion and results. Based on the inputs collected by the students during the first day of professional practice and the representation made both individually and by the secondary school, it has been possible to develop the experience presented here.
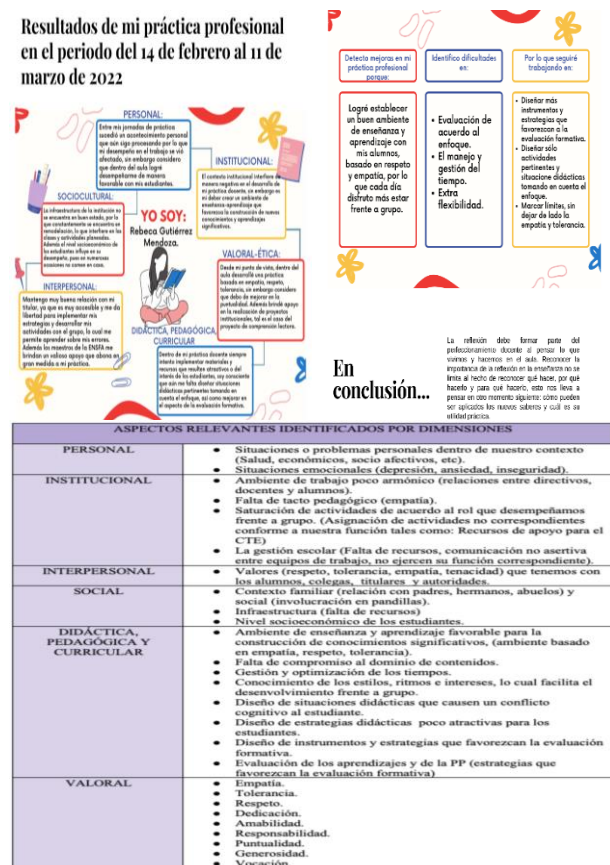
Figure 1 "Representation of data individually and by secondary school"
Source: Diagrams elaborated by Rebeca Gutiérrez M. and team from Escuela Secundaria Gral. No. 11

The analysis of the data collected during the follow-up phase made it possible to identify strengths and weaknesses that are present in each of the dimensions of teaching practice and thus to recognise the challenges that need to be addressed in the next didactic intervention, as they are explained below:

Personal dimension. From the point of view expressed in the introductory paragraphs, the systematisation of the experiences lived by the students is considered in the first place the personal dimension. They see themselves as individuals with qualities, characteristics and difficulties; with ideals, projects, motivations and imperfections that can be overcome with the support of the different actors involved in their training and mainly with the self-analysis derived from a reflective professional practice.

In this sense, there are two sides of the coin; on the one hand, there are those who express different health, economic and socio-affective situations, such as depression, anxiety, insecurity, emotional management, among other problems, both of a family and work nature, task saturation, inadequate time management and lack of organisation as critical factors that have negatively influenced the expected performance; however, on the other hand, there are those who express progress in the effective self-regulation of these factors, converting them into opportunities that support the improvement of their professional practice.

What is significant in the analysis is that they have fully identified the factors that teachers experience from this dimension and their influence, they have learned to capitalise on them for improvement, this shows that they are being trained as professionals who reflect on action and in it build new work strategies, new ways of searching, new theories and categories of understanding to face and define these problematic situations, new theories and categories of understanding to confront and define these problematic situations, because in acting in action and reflecting on it, they construct in an idiosyncratic way, the competences set out in the graduate profile, those that go beyond routine and regulated knowledge that slows down creativity and innovation (Zeichner, 1993). (Zeichner, 1993)

Institutional dimension. This dimension was also analysed because professional teaching practice takes place in the secondary school, seen as an organisation, where academic, management and inter-relationship processes are privileged, which is why it is the most important scenario for professional socialisation, as it is there where the knowledge, rules, traditions and customs of the profession are learnt in order to transcend and innovate.

And this is true, it is often said that future teachers are made in practice, it is precisely there, in the school environment, where they experience the profession and all the factors that influence it, in this sense, they recognise the work environment as a fundamental element for their performance, the pedagogical tact with which the teaching, learning and management processes are handled; empathy for the diverse circumstances that surround the lives of students, teachers and managers, mothers, fathers and tutors, the organisation of time and respect for the roles assigned to the different actors, and the school's openness to change, innovation and new ways of teaching in the face of the changing and dynamic reality of 21st century societies, relationships between teaching and management staff, as well as resources that enhance the role of the teacher and promote meaningful learning for students, empathy on the part of the head teacher, as well as the support of management staff.

From this point of view, a balance is made between the good and the complicated that the institutional environment becomes when trying to move from tradition to modernity, from the routine to the relevant and innovative, without considering the elements of the school culture that must be transformed from actions and not only from the impositions or new forms that some structural reforms bring with them. Fullan and Hargreaves (1999) say that no top-down imposition works, it is necessary to plan and work for change, in this way also impacting on the transformation of culture.

What is important in this analysis is that the student teachers are clear about their role as agents of change in an educational institution, from the different roles they play, whether in the teaching and learning processes or in school management and its interrelationships. As future teachers of Mother Tongue. Spanish, they have understood that they are responsible for ensuring that it is assumed as a social and cultural tool that can favour inclusive communication environments and situated literate language practices (Cassany, 2012).

Interpersonal dimension. From this perspective, it is recognised that practice is based on the relationships of the actors involved in the educational process: students, teachers, principals, parents, tutors and guardians. These relationships are complex, as the different educational actors have a great diversity of characteristics, goals, interests, conceptions, beliefs, etc., and the way in which these are interwoven, constitute the work environment, representing the institutional climate that is being built every day within the educational establishment, where each of the actors are responsible for their roles and functions.

In this analysis, the teacher training students express: "in order for interrelationships to contribute to the mission entrusted to schools, it is necessary to permanently deploy a series of values such as respect, tolerance, empathy and tenacity among all the actors in the educational process". Planning teaching so that the student becomes the main protagonist, monitoring and evaluating the results of their practice and using these results to improve, transform and innovate it in a collegial manner. They comment that this cannot be achieved if they remain anchored to traditionalist practices, whose objective is the development of syllabus content, where the teacher's performance is untouchable, since the teacher lives the collective myth of isolated work. It is necessary to have feedback from the observations made by the heads of the groups where they develop the professional practice of teacher training students, which will allow them to identify, from a different perspective, the areas of opportunity that continue to be their main challenges.

These observations have been fundamental for trainee teachers to realise that professional teaching practice needs to be socialised, because its results depend on these interrelationships that are established to promote a common project in secondary schools. Today more than ever, they detect the need to be involved in these institutional projects with an impact on the critical factors that become obstacles for the school to achieve its objectives; to provide all students with opportunities to prosper and become active citizens, committed and driven by collegial work in which interrelationships in favour of education are privileged.

Social dimension. Another dimension analysed is the social dimension, which implies reflecting on the meaning of the teacher's work, in the historical moment in which he/she lives and from the performance environment; his/her expectations and those that fall on the figure of the teacher, together with the pressures from the system and families. It is also necessary to reflect on the way in which classrooms become spaces in which culture can be transformed and those critical factors that limit the opportunities students have to construct meaningful learning.

In this analysis, the teacher training students have taken into account the importance of those factors of demand (Schmelkes, 1997) that are often determinant in the educational process, for example, the family context from which their students come, those relationships with fathers, mothers, tutors, brothers, sisters, grandfathers, grandmothers, uncles, aunts and other family members with whom they live.

They also value the prevailing socio-cultural and economic context, as well as the conditions they have to access learning and it is not that these factors did not exist before, UNESCO (2020) says that the SARS pandemic - CO-V2, which showed the vulnerability of education systems to offer what is constitutionally stipulated: "Education for all".

Today more than ever, teachers in training have identified those barriers faced by secondary school students to learn and participate in educational processes (SEP, 2018a); from the school infrastructure in their homes and in the environment, teaching materials, objects of daily use, the organisation of the school day, among others that prevent the principle of equity and inclusion from being put into practice. When taking stock of the factors they have in favour of developing their professional practice, the teacher training students identify the lack of support from their families and, in general, an external context that is threatening to the aims pursued at school, but which can become the most important reference point for promoting meaningful and lasting learning. The socio-emotional problems that impact on the vulnerability of students, teachers and the different actors involved are evident. The challenge then is to take advantage of the Social Practices of Language (SLP) as opportunities, not only to strengthen communication skills, but also as a means to work on these socioemotional aspects that affect the education system in general. As Guerrero, J. C. O., & Choque, K.B.H. (2022) share, there are stories that show several systematic aspects such as positive and negative emotions and feelings, changes in moods in teaching practice and where reflection becomes evident in order to continue improving and changing in daily life.

Didactic dimension. This dimension is considered to be one of the most important, because it refers to the role of the teacher as an agent who, through the teaching processes: orients, directs, facilitates and guides the interaction of students with collective, culturally organised knowledge so that they develop communicative skills and thus advance towards critical literacy[2], identifying that the teacher's function is to facilitate the learning that students construct in the classroom and other scenarios in which they develop, which is why it is the dimension where the teacher's role is of greatest importance.

---

[2] Cassany (2010) points out that in literate practices the term "literacy" is broad, because it encompasses the domain of both the written code, discursive genres, the roles of the author/reader, the social organisation of language practices, the identities of author and reader, the values, representations and attitudes associated with these practices, as well as the ways of thinking developed through them.

The analysis carried out makes it possible to identify aspects such as the following: Mastery of the SLPs that are developed during the periods of professional practice, knowledge of the groups with which they develop their practice, planning of didactic situations for the consolidation of communicative skills, learning environment and interrelationships that are established for the development of class sessions, as well as didactic strategies that are implemented, resources and support materials, evaluation of learning and CP, use of time, discursive resources, personal presentation, among others that were considered relevant.

From the comments made, both individually and by the secondary school, the importance of understanding the contents of teaching at an exhaustive level, which allows teachers in training to arrange, organise knowledge in a meaningful and strategic way so that students can appropriate it and give it a place in their daily actions, for this they must know the characteristics and learning processes of the students, since the Mother Tongue. Spanish is the most powerful tool they have to express themselves orally and in writing to the world and thus assert their knowledge, feelings and perceptions, these processes Darling (2001, p. 371), conceives them as "pedagogical content knowledge".

The students explain the importance of elaborating didactic planning based on a problematic situation, which invites students to use their communicative tools in an interrelated way and strengthen them through the strategies and resources they implement to solve it, according to the 2017 curriculum proposal, that at secondary level, the fundamental purpose of this subject is for students to consolidate their social practices of language, to participate as social, autonomous and creative subjects in different areas, and to reflect systematically on the diversity and complexity of the uses of language in multicultural contexts. In this context they understand that their task as mediators is not limited to giving continuity to a syllabus; their role is to provoke, incite and challenge learners to use their Mother Tongue with a communicative purpose and aim in the socio-cultural context where they interrelate with different actors.

Some detect that they still need to move from a structural approach to an approach where SLPs are used as a vehicle for doing with language and, as Lerner (2001, p. 25) says, help them to be "full members of the community of readers and writers", and moreover, citizens possessing linguistic, communicative and pragmatic competence (Cassany, Luna and Sanz, 1998).

In this analysis they also identify that the atmosphere established in the group is fundamental for the construction of learning, they understand discipline as that interest and motivation with which students participate in a class, where the main purpose is to strengthen their communicative skills both orally and in writing, so they cannot expect that silence that comes from those who have not learned to use language to express themselves to others. Its strategies and activities are planned so that the student is a protagonist who knows how to write, speak, listen and be silent when the communicative situation warrants it, supported by innovative resources and materials that allow them to arrive at new constructions based on what they know, like and are familiar with.

In terms of strategies and resources, this continues to be a challenge that the student teachers are continually facing, which, based on the results and their reflection in each class, is being overcome. They recognise that there is still a lot to learn, but they are willing to listen to the suggestions and recommendations of their teachers, as well as to the advisor of the "In-service learning" course. Latapí (2004) says that this is how teachers learn; by supporting each other from the inputs generated in professional practice.

One of the greatest difficulties encountered in the development of the sessions is the use of the formative approach to evaluation, that which serves to know, act and improve (Guerra, 2001) the interventions with the students, the use of strategies and instruments that make it possible to monitor the students' learning process and which should be taken into account from the pre-active phase of teaching (Saint-Onge, 2000). There are attempts to assume assessment as a tool that facilitates the help that the teacher can offer to students in the face of difficulties that arise, however, it is still one of the greatest challenges identified in teaching practice.

It is often said that time is a non-renewable resource, hence the importance of using it to favour the development of the expected learning in the subject of Mother Tongue. The teachers of Spanish and in fact, despite the frequent interruptions typical of an educational organisation, they say they use time effectively and efficiently, they are asked to observe the students in their practice groups to corroborate that they perceive it this way, because from the discourse we repeat over and over again that they are the main protagonists; they do not want to see faces of boredom, annoyance, tedium, frequently asking "what time is the end of the class? We prefer to see the hustle and bustle of communities of readers, writers and speakers, who interact with their academic peers to strengthen learning and who, when the class is over, say: "Is the session over so soon?

One of the pedagogical principles (9) of the 2017 curriculum proposal (SEP, 2017) states that the teacher must frequently model learning and if we are talking about Mother Tongue. Spanish, the discursive resources used by the trainee teacher during the different moments of the class become references to participate in SLP, which is why this aspect of professional practice was analysed on the first day of practice, detecting that there are significant advances because it is considered that the class is a discursive genre par excellence, which has a didactic intention, as well as both an explanatory and argumentative orientation, which aims to ensure the generation of a favourable environment for learning and requires the teacher to use different strategies, devices or discursive resources. Important challenges are still identified in the instructions, explanations, examples, demonstrations, arguments and answers to students' concerns and doubts, as well as in promoting reflection, questioning and the expression of ideas, but, above all, in that tone of voice that invites them to join the class and to show that they are empathetic to the situations experienced by the students. In the same vein, we talk about personal presentation as a resource to show that, just as language has a formal and informal use depending on the communicative situation in which one participates, punctuality, personal presence, responsibility, willingness and the enthusiasm with which the session is developed, show the commitment of the teacher training student to teaching.

Value dimension. This dimension has a special significance because teaching practice is not neutral; it inevitably involves a set of values. Each teacher, implicitly or explicitly, manifests his/her personal values, beliefs, attitudes and judgements; he/she shows his/her world views, his/her ways of valuing human relations and knowledge, as well as his/her ways of guiding teaching situations, that is to say, each student teacher builds his/her own teaching style.

From this perspective, the analysis carried out allows us to identify that trainee teachers adopt empathy, tolerance, respect, dedication, as well as kindness, responsibility, punctuality, generosity, vocation, creativity, appropriate personal presentation, among other virtues that allow them to act with civic, ethical and legal values and principles inherent to their social responsibility and their professional work with an intercultural and humanist perspective.

Conclusions

The analysis carried out has become a reference that allows us to rethink both the role of the coordinator of the "Service Learning" course, as well as the tasks inherent to the professional teaching practice carried out by the teacher training students in secondary schools. It is valuable that they can identify their strengths, preserve them and use them to address their areas of opportunity and face the challenges in the next intervention, thus, in this way, they experience the reflective process that allows them to analyse, rethink, act, transform, improve and innovate their substantive role in secondary schools.

Among the strengths identified are the results that students have when consolidating their social practices of language to participate as social, autonomous and creative subjects in their different areas, and to reflect systematically on the diversity and complexity of the uses of language and this is precisely the purpose of the subject of Mother Tongue. Spanish in secondary education (SEP, 2017).

CHÁVEZ-ALBA, Romelia, ORDÓÑEZ-SUÁREZ, Teresa, CHÁVEZ-ALBA, Enied Cuitláhuac and MARTÍNEZ-ROCHA, Diana Itzel. Teachers in training; post-pandemic challenges in the professional practice. Journal Education Sciences. 2022.

They also identify skills they possess to create authentic didactic situations for the development of communicative skills (4 students mention this), the interrelationships established between trainee teachers and students have been improved and strengthened (6 students refer to this), effectiveness in the use of time, enjoyment of teaching, confidence in discursive resources (6 students refer to this), the students are able to experience the Social Practices of Language that are developed (2 students so stated), use of playful strategies to promote meaningful learning, use of formative assessment (13 students mentioned this), design and application of interactive strategies where language is used to solve real situations, design and use of didactic material that becomes a support for the construction of the expected learning.

The adoption of the socio-cultural communicative approach in their interventions is also a skill that is mentioned, as well as the creation of learning environments that favour interaction in authentic communicative situations, the use of digital tools to dynamise learning and make it meaningful, attention to the emotional state of the students, as well as the mastery of the learning contents; Attention to suggestions, indications and observations of group leaders and advisor of the subject "Service Learning", among others that have allowed them to take on teaching from a humanistic, integrative perspective and with the approach of inclusive education.

It is also interesting to review the weaknesses that are identified, because one of the challenges facing those who are present in the accompaniment is precisely to help overcome and work on the areas of opportunity in a favourable way in subsequent practices, among the most important of which are noted: the lack of tools to design dynamic and challenging didactic situations, the enthusiasm and excitement of the trainee teacher for what he/she does, the mastery and management of the contents of the subject (this is mentioned by 6 students), improving the use of didactic materials, using the pedagogical and didactic approach of the subject (this is mentioned by 6 students), using formative assessment as an opportunity to know, as well as to act and improve teaching and learning strategies (this is mentioned by 9 students).

The use of creativity in the design of teaching and learning strategies is another weakness identified by 5 students, the evaluation criteria for the assessment of products is also an identified limitation (3 students report this). Another aspect is the documentation in different sources of information to acquire mastery and management of learning content, as well as making the student the main protagonist of the class (4 students refer to this), promoting intellectual challenges with language, organising activities, offering clear indications, among other aspects that are detected as important to improve professional practice.

The extracts from this analysis clearly show what the students consider to be their strengths, which serve as anchors for them to continue developing their own teaching style and thus move towards strengthening the competences set out in the LEAEES graduate profile that refer to the professional and disciplinary component.

References

Cassany, D. (2012). *Prácticas letradas contemporáneas: Claves para su desarrollo*. Riosdetinta. S. A. de C.V.

Cassany, D., Luna, M., & Sanz, G. (1998). Enseñar lengua. Grao

Darling, L. (2001). *El derecho de aprender. Crear buenas escuelas para todos*. Biblioteca para la Actualización del Maestro. SEP.

Fierro, C., Fortoul, B & Rosas, L (1999). *Transformando la Práctica Docente. Una Propuesta Basada en la Investigación Acción*. México: Paidós. Capítulos 1 y 2.

Fullan, M., & Hargreaves, A. (1999). *La escuela que queremos* SEP.

García Cabrero, B., Loredo Enríquez, J., & Carranza Peña, G. (2008). Análisis de la práctica educativa de los docentes: pensamiento, interacción y reflexión. *Revista electrónica de investigación educativa*, *10* (SPE), 1-15. https://doi.org/10.7203/relieve.9.1.4351

Gazzo, M. (2020). La educación en tiempos del COVID-19: Nuevas prácticas docentes, ¿nuevos estudiantes? Red Sociales, *Revista del Departamento de Ciencias Sociales,* 07(02), 58-63. https://doi.org/10.2307/j.ctv2zp4tv4.5

Latapí, P. (2004). *Cómo aprenden los maestros. Cuadernos de discusión. Hacia una política integral para la formación y desarrollo profesional de los maestros de educación básica.* SEBN. https://doi.org/10.12795/jdu.2018.i01.44

Lerner, D. (2001). *Leer y escribir en la escuela: lo real, lo posible y lo necesario* (pp. 1-6). Fondo de cultura económica.

Molini, J., & Sardi, M. G. Nuevos desafíos pedagógicos para un escenario postpandemia. ¿Qué desafíos se vivencian en las clases de la Escuela Secundaria hoy?, 6.

Olaya Guerrero, J. C., & Hilario Choque, K. B. (2022). *Investigación cualitativa. Experiencias educativas durante la pandemia y postpandemia. Año 2021 y 2022.* Warisata - Revista De Educación, 4(12), 31–39. https://doi.org/10.33996/warisata.v4i12.963

Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura. (2020). *El coronavirus COVID-19 y la educación superior: impacto y recomendaciones.* https://doi.org/10.18356/7b041422-es

Saint-Onge, M. (2000). *Yo explico, pero ellos ¿aprenden?* Biblioteca para la Actualización del Maestro. SEP.

Santos Guerra, M. Á. (2001). *Dime cómo evalúas (en la universidad) y te diré qué tipo de profesional (y de persona) eres.* https://doi.org/10.5354/0717-3229.2003.47513

Schmelkes, S. (1997). *La calidad de la educación primaria, un estudio de caso.* Biblioteca del Normalista.

SEP. (2017). *Aprendizajes clave para la educación integral. Plan y programas de estudio para la educación básica.* SEP. https://doi.org/10.20983/cuadfront.2022.54.14

SEP. (2018a). *Aprendizajes clave para la educación integral. Estrategia de equidad e inclusión en la educación básica: para alumnos con discapacidad, aptitudes sobresalientes y dificultades severas de aprendizaje, conducta y comunicación.* SEP. https://doi.org/10.25145/c.educomp.2018.16.020

ZEICHNER, K. (1993). "*El maestro como profesional reflexivo*". Cuadernos de pedagogía, n. 220.

Follow-up of graduates, an institutional program that should be the hallmark of a Public Teacher Training College in the State of Mexico

Seguimiento a egresados, programa institucional que debería marcar el hacer de una Escuela Normal Pública del Estado de México

MENDOZA-GONZÁLEZ, Nancy†*, FUENTES-FAVILA, Luis Macario, MOLINA-VÁZQUEZ, Gabriel and ORDÓÑEZ-SUÁREZ, Teresa

Escuela Normal de Atlacomulco "Profesora Evangelina alcántara Díaz", Mexico.

ID 1st Author: *Nancy, Mendoza-González* / **ORC ID:** 0000-0001-9157-0890, **CVU CONACYT ID:** 379664

ID 1st Co-author: *Luis Macario, Fuentes-Favila* / **ORC ID:** 0000-0003-4836-6338, **CVU CONACYT ID:** 379826

ID 2nd Co-author: *Teresa, Ordóñez-Suárez* / **ORC ID:** 0000-0002-2137-3485, **CVU CONACYT ID:** 680401

ID 3rd Co-author: *Gabriel, Molina-Vázquez* / **ORC ID:** 0000-0003-3214-2022, **CVU CONACYT ID:** 1153278

Abstract

The monitoring of graduates within Higher Education institutions, specifically Public Normal Schools, aims to identify the impact of their graduates in the labor field, since it is based on the interpretation and analysis of the data derived from the applied instruments (survey and interview) to graduates and employers, from which the information emanates that will reorient the design of the study plans, the improvement of the practice of teacher educators, the review of the relevance of the contents that make up the programs, the linking with basic education institutions, the use of technological materials, infrastructure services, the articulation between areas and departments and guidance for the construction of teacher improvement and professionalization programs, thereby contributing to the progress and transformation of future country teachers.

Monitoring, relevance, transformation

Resumen

El Seguimiento a Egresados dentro de las instituciones de Educación Superior, específicamente las Escuelas Normales Públicas tienen como objetivo identificar el impacto de sus egresados en el campo laboral, pues es a partir de la interpretación y análisis de los datos derivados de los instrumentos aplicados (encuesta y entrevista) a los egresados y empleadores, de donde emana la información que reorientará el diseño de los planes de estudio, la mejora de la práctica de los formadores de docentes, la revisión de la pertinencia de los contenidos que integran los programas, la vinculación con las instituciones de educación básica, el usos de materiales tecnológicos, los servicios de infraestructura, la articulación entre áreas y departamentos y la orientación para la construcción de los programas de mejora y profesionalización docente, contribuyendo con ello a la progreso y transformación de los futuros docentes del país.

Seguimiento, pertinencia, transformación

---

† Researcher contributing as first author.

Introduction

Higher education institutions in Mexico offer bachelor's degree studies, which are taken after high school education, among them we can identify both public and private universities, polytechnics and teacher training colleges, the latter being the subject of study of this paper.

Within the organization, tasks and even problems faced by the Public Normal Schools is to follow up on their graduates, and identify the level of impact they have in the labor market, because from this, in theory, should emanate the proposal for improvement and change to the plans and programs of study, as well as the process of updating and teacher training.

For this reason, for the case of the State of Mexico, the State Program for the Follow-up of Graduates for the Public Teacher Training Schools of the State of Mexico (PESE) was created, which was published in 2014 and plans as general objective:

> "To guide the strategic process of the Follow-up to Graduates of the Public Teacher Training Schools of the State of Mexico, from the analysis of the situations of professional performance, labor and social context of the graduates, through a methodology that allows assessing the relevance and impact of the Educational Plan and Programs for teacher training; at the same time, favoring the academic capacity of the management function; of the core of teachers towards timely and effective attention to the problems, needs according to expectations of improvement, which ensure their quality continuously" (2014, p 9).

Demanded as urgent and necessary to structure within the Normal Schools the Institutional Program of Follow-up to Graduates (PISE), assigning to the area or department that has teaching staff to develop both the general objective and the specific ones, recovering the following:

- Improve the quality of the educational services of the Normal Schools based on the analysis of the degree of satisfaction achieved by the graduate during their training.

- To evaluate the impact of the graduate and the context that defines him/her, during the first, second and fifth year of his/her work/professional performance in the state basic education.

- To support the improvement of the level of performance of graduates in the process of competition and entry into the labor/professional space.

- To create references on the follow-up of graduates of normal education in order to contribute to the systematization of specialized knowledge that can be oriented to proposals on the design of integral processes of postgraduate training.

- Assess the rate of hiring and entry conditions of graduates in the workplace (2014, p 9).

Development

For the achievement of the objectives, the directors of the Escuela Normal de Atlacomulco "Profesora Evangelina Alcántara Díaz" (ENA), have designated the teaching staff of the Department of Educational Research and Innovation (DIIE), the realization of this task.

The first action is the revision of the content of the state program, in order to adapt it to the needs of the population and therefore of the context, that is, to make this exercise meaningful, understanding it as "that which allows the subject to broaden his level of understanding and explanation of his different educational practices and actions" (Perales Ponce, 2006, p.12), hence the need to identify the actions, as well as the temporality, which are listed below:

1. General database of graduates.

2. Introductory session

3. Methodological process

4. Evaluation of the results stage

5. Alternatives

6. Apply/evaluate alternatives

The purpose of the database is to verify that there is information on the graduating class, and if this is available, the next phase is to update it; if not, the researcher(s) will undertake the task of building it.

The introductory session aims to establish communication with those involved (authorities, employers, graduates). The by-product is the delimitation of the sample by Educational Program (EP), to outline and develop the contact, communication and sensitization strategies with the participants.

The methodological process allows establishing the criteria, as well as the methodological route (application of techniques and instruments, scheduled visits, meetings with employers, among others), to facilitate the collection of information.

The evaluation of results starts with the analysis and establishment of conclusions, i.e., it is the evaluation of the process, the results and the fundamental criteria for the achievement of this stage.

Subsequently, the stage of alternatives appears, a moment that emerges from the results and the impact they may have on the teaching staff, students or directors, which, if it results, would have to modify the conceptualization of practice of each of the subjects involved.

Database

The construction of the database by educational program requires general information such as: name of the graduate, age at the time of enrollment in the first semester, marital status at the time of entry, educational program attended, generation to which he/she belongs, municipality of residence, reasons for choosing the degree, as well as the specialty, time devoted to study. The purpose of this section is to know the motive or motives that prompted the graduates to choose the ENA as an institution to train as teachers, in addition to the inclination towards the chosen educational program.

The second part has been named Process of attraction and selection of the best candidates to study teacher training, it gathers information regarding the process of dissemination of the educational offer, as well as the induction to teacher training and the knowledge of the features of the graduate profile.

Section three, Perception of the quality of the training received during the bachelor's degree course, is proposed with the idea of recovering information regarding the quality of the contents of the subject programs, the depth in the treatment and analysis of the contents, the application of the programs of the different subjects, the follow-up of the programs, the didactic strategies used by the teacher educators in the class sessions, the process of evaluation of learning and performance, the relationship between courses and subjects, the link with basic education institutions, the experience during the work and stay in the seventh and eighth semesters, the counseling process for the preparation of the reception document, the recovery of opinions on training support services, quality of infrastructure and technologies, concluding with the efficiency of the administrative processes carried out by the School Control Department.

The articulation of the departments that integrate the Escuela Normal de Atlacomulco in the initial formation of the student allows acquiring information about the participation of the students in the activities programmed by the institution, as well as in the academic projects.

Another important element that integrates this base, is the section that allows to know the experience of the graduate at the time of enrollment and participation in the competition for entry to the service, where issues such as are integrated: information on the requirements and periods of the competition were accessible, identify the percentage of relationship between the contents reviewed in the courses with the items of the instrument, the relationship between teaching practice, intellectual skills and professional ethical responsibilities evaluated in the process of entry into service, the place they occupied when issuing the priority list, the time elapsed from the time of graduation from the EN, until receiving the first appointment and its validity.

Entering the labor market is another of the elements, since it is necessary to know the place of assignment according to their appointment, the period, number of hours assigned and the follow-up to that first moment of work that gives way to the aspect of construction of Educational Programs, where the types of courses recommended by the advisors or tutors for the strengthening of updating during the first two years of work are questioned.

Thus the interaction with the employer, which through a face-to-face interview with the immediate authority, direct or deputy director, there is a dialogue on the degree of satisfaction, the use of school time, the professional practice, taking up aspects such as: didactic planning, content mastery, evaluation of learning processes, learning achievement, communication with parents and the contribution to the continuous improvement of the school, aspects that allow shaping and structuring this database, which after being filled in, should be analyzed, because from it derive the improvement actions and thus comply with the social requirements to those who are being trained as teachers.

Introductory session

A meeting was scheduled with the Initial Training staff to agree on the date, time and place. Subsequently, a summons was sent to the students of the three educational programs offered by ENA, Bachelor in Teaching and Learning English in Secondary School (LEAIES), Bachelor in Teaching and Learning Spanish in Secondary School (LEAEES) and Bachelor in Teaching and Learning History in Secondary School (LEAHES), to present the PISE, socialize the objective, as well as the actions that integrate it and in which the graduates participate.

The members of the graduating class of 2018 - 2022, presented themselves and were attentive to the socialization of the content and requests, agreeing to comply with them, as evidenced by the minutes of agreements.

This meeting was also attended by the college of advisors who performed the function at that time and committed themselves to support the work that was about to begin.

Methodological process

Using the Forms application of Microsoft 365 or better known as Office 365, a form was structured with which it was intended to obtain the information that would give rise to the database and would subsequently yield the information that would allow compliance with each of the specific objectives.

After reviewing the relevance of structuring an instrument with 75 items that implied reading and reflecting on each of the answers, the researchers decided to divide it into three parts, which are included below:

1.- Name of the respondent:

2.- Age at the time of enrollment in the first semester of the degree program:

3.- Marital status at the date of enrollment in the Normal School.

Normal School where he/she completed the initial training.

Educational program attended.

Generation.

Municipality of residence.

What was the main reason you opted for the specialization?

Did you work during your studies?

In what activity?

How many hours of the day did you dedicate to study?

How many hours of the day did you work?

PROCESS OF ATTRACTION AND SELECTION OF THE BEST CANDIDATES FOR THE NORMALIST TRAINING

Was there an induction period for the students to get to know the structure of the Normal School?

Yes

No

Was the student informed about the desirable traits of the future teacher?

Mention the formative intention of the normal education studies:

What type of formative approach, is it explicit in the undergraduate curriculum?

Learning-centered approach

Competency-based approach and Curricular, academic and administrative flexibility.

Pedagogical approaches refer to theoretical-methodological orientations.

Disciplinary approaches.

All.

Were the texts reviewed in the courses accessible for your consultation?

What was the emphasis of the proposed activities?

The relationship with knowledge was:

Theoretical

Practical

Was the analysis of the texts, carried out in the class sessions?

Do the texts offer possibilities of relation with the practice?

What percentages of texts and/or activities of the program were worked during the development of the courses?

Was there an approach to the classroom work by the school authorities or those responsible for the follow-up of study plans and programs to observe the development of the class sessions?

Did the teachers responsible for the courses propose alternatives to review their teaching practice?

Were the activities worked on, based on the revision of the texts?

Interactive

Practical

Theoretical

The evaluation in the courses was focused on:

Performance

Evidence

Products

The form of evaluation was never disclosed.

Was there any mention by a professor of the way in which the contents of his course were related to another course or, if applicable, to the Professional Internship Course?

To what degree did the internships and their problems find support in the contents of the rest of the courses or in those of the specialty?

Always

Almost always

Sometimes

Never

Did your stay in the basic education institutions take place in a framework of?

Tolerance

Learning

Respect

What were the type of pedagogical orientations offered by the practice group leaders?

Focused on learning

There were only actions regarding the improvement of the practice (didactic actions).

There were no orientations to be highlighted

Were these orientations complementary to those of the holders of the Teaching Practice path?

Yes

No

Why?

How far from the Normal School was the school assigned to develop the activities of the 7th and 8th semesters?

Did the professional profile of the head of the group(s) you were in charge of respond to the educational program you attended?

Yes

No

Do you consider the organization to elaborate the degree work (the portfolio of evidences, the professional practices report and the research thesis)?

Excellent

Good

Can be improved

Deficient

Regarding the bibliographic collection that the Escuela Normal has, it was:

Sufficient

Scarce

Deficient

Does the computer center have materials to support the pedagogical practices, as well as the activities that emanate from each of the courses?

Yes

No

Recommendations:

Is the speed of the connectivity service of the Normal School?

Efficient

Deficient

How often do teachers at the Teachers' College use computer resources to deliver their sessions?

Always

Almost always

Never

Mention 5 computer resources used by teachers:

What was the turnaround time for issuing the semester report card?

ARTICULATION OF THE ENA DEPARTMENTS IN THE WORK OF THE STUDENT'S INITIAL FORMATION

Does the student representative's communication with the student body inform about relevant issues of the institution?

Yes

No

Why?

Is there active participation of students in the research projects developed in the Department of Educational Research and Innovation?

Yes

No

REGISTRATION AND PARTICIPATION IN THE COMPETITION FOR ADMISSION TO THE PROFESSIONAL TEACHING SERVICE

Was the information about the requirements and periods of the competition accessible to the interested parties?

Yes

No

In what percentage did the content and items of the entrance examination instrument correspond to the contents of the curriculum?

10 a 20%

20 a 40%

40 a 60%

60 a 80%
80 a 100%

What is the relationship between teaching practice and the knowledge and skills assessed in the competitive entrance examination?

Total

Partial

Null

What is the relationship between teaching practice, intellectual skills and professional ethical responsibilities evaluated in the entrance examination?

Total

Partial

Null

What was the place occupied in the priority list issued by the Teacher Career System Unit?

What was the result of the evaluation and the performance group, issued in the opinion, of the USICAMM?

What was the time elapsed from the time of graduation from the Normal School, until he received an appointment to work as a teacher of the educational sub-system?

Type of appointment issued by the authority?

What is the period of validity?

ENTRY INTO THE LABOR MARKET

Place of assignment, according to appointment:

Number of hours assigned:

If there were any incidents during the first six months of teaching, what were they?

What were the areas of attention suggested by the tutor to improve teaching skills and competencies?

EDUCATIONAL PROGRAMS

Based on the level of performance obtained, what were the recommended courses to strengthen teaching updating during the first two years of work?

OTHER PROMOTIONS:

Were you assigned to any role other than teaching, which one?

EMPLOYER'S DATA:

Name of work center:

Work center code:

Type of institution of enrollment:

Type of support:

a) State public:

b) Federal public

c) Location:

According to school organization

A) Fully organized

B) Other

Level of performance granted to the teacher throughout the school year

Score obtained in the evaluation card of the entity's career ladder area:

CONTEXT OF JOB MOBILITY:

What motivates the request for a change of assignment?

How often do you make such a request to the authorities?

PROFESSIONAL DEVELOPMENT AND ETHICAL COMMITMENT TO THE PROFESSION:

What was the result of the evaluation obtained after the first year of service?

What was the updating and strengthening program?

LEVEL OF EMPLOYER SATISFACTION:

What is your perception regarding?

A) Use of school time

B) Didactic planning

C) Content mastery

D) Student assessment

E) Student learning achievement

F) Parent communication

G) Continuous school improvement

Once the instrument was structured, it was sent to the institutional mailing considering the total number of future graduates:

Number of students	Number of students
LEAHES	15
LEAEES	31
LEAIES	40

Table 1 Graduates of the Generation 2028 - 2022

A date was set for the reception of information, and once the agreed time had arrived, the researchers set about the task of reviewing the data recovered from the Forms application, with 100% of responses from LEAIES, LEAEES and LEAHES, from the first part of the instrument.

For the purpose of this research, it was decided to present only the data from the History program, since its members were the only ones who, in addition to completing the survey within the requested time, upon taking the entrance exam and obtaining the result from the System Unit for the Careers of Teachers (USICAMM), did so by email and WhatsApp number provided. In addition, once they were called for the assignment of a position, they sent the appointment of the selected position, allowing the researchers to conclude with the specific objectives set by the PISE.

Methodology

The methodology used to carry out this research is redirected from PESE and consists of longitudinal follow-up of graduates in order to survey and interview them; however, this does not exempt the researchers from documenting and determining the path to follow.

If we start from the idea that research "is a set of systematic, critical and empirical processes that are applied to the study of a phenomenon" (Hernández, 2010, p. 4), this obliges researchers to document and determine the way forward.), this obliges researchers to keep in mind the topic or problem, as well as the objectives, both the general one that aims to guide the strategic process of graduate follow-up (SE), and the specific ones: Improve the quality of educational services, Evaluate the impact of the graduate in the labor context, Support the improvement of the level of performance, Create references on the SE in the ENs and Assess the rate of hiring and conditions of entry into the labor market.

This led to the definition of the two main approaches to research: the quantitative approach and the qualitative approach.

For Hernández Sampieri, the quantitative approach is characterized by:

1. Statement of the problem.

2. Review of the literature for the construction of the theoretical framework.

3. Construction of the hypothesis.

4. Development of the research design.

5. Sample selection.

6. Data collection.

7. Data analysis.

8. Preparation of the report of results.

It is clear that research of this type is as objective as possible, i.e., the researcher observes and records from afar, leaving aside his or her beliefs or assumptions.

For the qualitative approach, the questions and hypotheses can be developed before, during or after data collection and analysis, which is why it is thought to be ideal for this research, given that, during the process, the questions can be modified, specifically in the stage of interviewing employers.

However, it is also recommended that the following steps be considered:

1. State the problem, which can be modified.

2. From examining the social world, the coherent or grounded theory is developed, which allows observing what is happening around it.

3. Hypotheses are generated during the process and are refined as data are collected.

4. To collect data, the researcher poses open-ended questions, which can be expressed through written, verbal and nonverbal language.

5. The techniques to be used to collect data are: unstructured observation, open-ended interviews, document review, group discussions, evaluation of personal experiences, recording of life histories, and interactions and introspection with groups or community.

6.   The inquiry process is flexible

7.   It is based on an interpretive perspective.

8.   The researcher is introduced and is aware that he/she is a part of.

Thus, qualitative research allows and facilitates the depth of the data within the social context, since the researcher is the instrument of collection, and thanks to the interaction, observation and description of the participants, he/she devises the way to record them.

As for the analysis, this will be in accordance with the form and moment in which the data were obtained, it will be more focused on the description of the information and the development of themes.

Some of the elements that can be used to analyze the data range from texts, images, documents, personal objects, among others.

Hernández Sampieri suggests that, for the presentation of results within this research approach, the researcher should use a variety of formats such as: "narratives, text fragments, videos, audios, photographs and maps; diagrams, matrices and conceptual models" (2010, p.14).

Once the differences between the two research approaches have been discussed, it is concluded that for the execution of this research and given the topic to be addressed, the best way to follow will be the qualitative one, since the researchers are teachers who work at the ENA and were part of the teaching staff of those who make up the selected sample.

Results

The 2018 - 2022 generation specifically of the History program that for the 2018 school year will be integrated by 21 students, concluded with a total of 15 graduates, being 7 men and 8 women, when analyzing the answers regarding the main reason that led them to choose the history program, 53% selected that for liking history, this is an indicator of the importance of feeling at ease and motivated to read and document themselves about the historical facts that will lead them to build different scenarios when planning a class, that is to say to modify their didactics.

Regarding planning: the formative intention of the normal education studies was made known, 47% of the respondents answered yes, complementing the answer as follows: to train competent teachers committed to education and thus achieve an education of quality and inclusion for secondary school students, thus proving that the ENA, fulfills the mission that has been transposed as an institution of higher education and that reads as follows: The Escuela Normal de Atlacomulco "Profesora Evangelina Alcántara Díaz" provides future teachers with a solid initial training and education professionals with continuing education of excellence, to exercise teaching in an innovative and alternative way in the new educational contexts, to contribute to the transformation of society with a gender perspective, substantive equality and inclusion. As well as the provisions of the Ministry of Public Education, "inclusion implies the transformation of schools, which are strengthened by diversity and promote the learning of all students" (SEP, 2018, p.21).

When questioned if the revision of the texts in each of the courses was accessible for consultation, 88% responded affirmatively, while 12% registered no, as can be seen in the following graphic.

16. ¿Los textos revisados en los cursos fueron accesibles para tu consulta?

Más detalles   ⚙ Información

● Si   15
● No   2

Graphic 1 Revision of texts

Those who responded negatively mention that there was no syllabus available online or in the library, a reality that did not limit the performance of the teacher trainers, because even though this was one of the weaknesses faced during the development of the 2018 curriculum starting with the generation selected as a sample, this did not limit the achievement of the competencies of the graduate profile to be developed (Generic competencies, Professional competencies and Disciplinary competencies). Verifying what Fierro mentions "to approach the problem of teaching from the inside, to see it and live it...to understand it together with them and to be able to measure the distance that separates each one of them" (2010, p.18).

Even so, the following questioning shows the effort of the teachers who taught the courses of the curriculum strip, since most of the students recognize that the bibliography provided was useful for the development of the activities.

When asked about the relationship between the content of the texts and the emphasis of the activities proposed by each of the teachers responsible for the course, 100% responded that this relationship was theoretical and practical, thus contributing to the achievement of the disciplinary competencies derived from the graduate profile.

The analysis of the texts reviewed in each of the courses that integrated the 2018 curriculum was: 47% expository, 24% argumentative, 18% historical and the remaining in narrative and literary.

20. ¿Cómo fue el análisis de los textos, realizado en las sesiones de clase?

Más detalles

● Narrativo	1
● Argumentativo	4
● Expositivo	8
● Histórico	3
● Literario	1

Graphic 2 Text analysis

Regarding the question "Do the texts offer possibilities of relationship with practice?", 100% answered yes, as can be seen in the graph.

21. ¿Los textos ofrecen posibilidades de relación con la práctica?

Más detalles   ☼ Información

● Si	17
● No	0

Graphic 3 Relationship of the texts

In turn, they argued that the review of these texts allowed them:

"Because they helped us for the continuous formation of knowledge".

"They acquire new knowledge so that we can put it into practice, which would be action research".
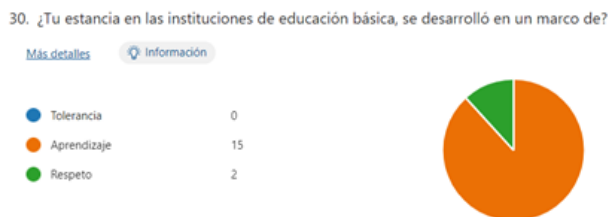
"They allow us to carry it out"

The question: In what percentage were the texts and/or activities of the program worked during the development of the courses? 76% selected the option from 80 to 100%, only 24%, i.e., 4 graduates registered from 50 to 70%. This allows us to interpret that the teacher trainers are committed to the development of the course programs assigned to them by the ENA's academic sub-directorate.

Another important data that helps to improve the exercise of teacher educators, by the guidance and perhaps training of a person external to their teaching practice, is the one who performs the follow-up of the execution of the study programs, with 100% responding that this task was performed, thus contributing to one of the goals and objectives of the study plans, continuous improvement, meeting one of the challenges of higher education: improving student performance and achieving better levels of terminal efficiency.

Regarding the linkage between the EN and the basic education schools, when asked if the teachers who were responsible for the courses proposed alternatives to review their teaching practice, 100% answered yes, adding that they also indicated how the contents were related to the Professional Practice Pathway. In addition to this, 65% of the sample registered that the practice sessions and their problems found support in the contents of the rest of the courses, but 24% did not, selecting the option "almost always".

The approach Your stay in the basic education institutions was developed in a framework of...? 88% answered: of learning and 2% of respect. See graphic:

30. ¿Tu estancia en las instituciones de educación básica, se desarrolló en un marco de?

Más detalles   Información

● Tolerancia   0
● Aprendizaje   15
● Respeto   2

Graphic 4 Stay in basic education institutions

Another of the elements that mark and to a certain extent determine the meaning of teacher training is the interaction in basic education schools with the teachers in charge of the subject, as well as with the adolescents; therefore, it was considered pertinent to question them about the type of pedagogical orientations offered by the holders of the practice group, registering 76% that these were always focused on learning and 24% were only actions regarding the improvement of practice, considering that these orientations were complementary to those of the holders of the Teaching Practices path, thus proving that "initial teacher training is a concern of different sectors of society and a central issue for educational policies"(Cuevas-Cajiga & Moreno-Olivos, 2022, p. 3).

The following approach was focused on the organization to prepare the Degree Project: Portfolio of evidences, Professional Practices Report and the Research Thesis, with 53% recognizing that it was good, 24% registering it as excellent, 12% that it could be improved and the remaining 12% deficient. It should be added that 100% of the members of the History program at the end of the 2022 school year, graduated under the thesis modality.

88% of the sample responded that Almost always the teachers who teach at the Normal School use computer resources, such as:

Videos, webinars, audios, movies, infographics"," Digital books, TICS, didactic and collective material, free apps ", "Cell phone and computer".

These are some of the approaches that were recovered from the survey and that are believed to contribute to the improvement of teacher training and to the fulfillment of the specific objectives outlined in the Institutional Program for Alumni Follow-up.

Conclusions

The Institutional Alumni Follow-up Program allows us to visualize the realities from which the students come, who decide to join the ENA, because it is an institution of higher education that has a history and academic trajectory in the northern part of the State of Mexico.

The choice of LEAHES responds to the taste for history, as well as for understanding the origin of the events that have marked the lives of human beings.

The Escuela Normal de Atlacomulco conducts the induction for new students, making clear the message regarding the formative intention, to train competent teachers committed to basic education.

Teacher educators renew and give meaning to their teaching practice based on the difficulties and vicissitudes that occur in their daily work.

Teacher educators relate the content of the texts that are reviewed within each of the courses with the practice that takes place in secondary school classrooms, that is to say, the relationship between theory and practice is put into practice.

Teachers exhaust the content of the assigned programs and are accompanied through the study plan and program follow-up program.

The stay of the graduates in the practice schools during their training process allowed them to put into practice the learning acquired in each of the courses that made up the curriculum, in addition to providing support to solve the problems that arose in practice.

The graduates received support in the construction of the document that allowed them to obtain the degree of Licentiate in Teaching and Learning of History in Secondary School.

References

Cuevas-Cajiga, Y., & Moreno-Olivos, T. (2022). Estado actual de la formación inicial docente en educación primaria: Un acercamiento al caso mexicano. Archivos Analíticos de Políticas Educativas. Revista académica evaluada por pares, independiente, de acceso abierto y multilingüe 30(112). https://doi.org/10.14507/epaa.30.6792

Fierro C., Fortoul B., Rosas L. (2010). Transformando la práctica docente. Maestros y Enseñanza Paidós.
https://upvv.clavijero.edu.mx › acom › documentos

Hernández Sampieri, R., Fernández Collado C., Baptista Lucio P. (2010). Metodología de la Investigación. Mc Graw Hill. https://www.icmujeres.gob.mx › Sampieri.Met.Inv.pdf

Perales Ponce R., C. (2006). La significación de la práctica educativa. Paidós educador. http://memsupn.weebly.com › uploads la_signifi...

Programa Estatal de Seguimiento a Egresados. (2014). https://sen.edomex.gob.mx/programa_estatal_de_seguimiento_a_egresados

Secretaría de Educación Pública (2018). Aprendizajes Clave para la educación integral. SEP. http://www.aprendizajesclave.sep.gob.mx › index-desca...

Secretaría de Educación Pública. (2018). Licenciatura en Enseñanza y Aprendizaje de la Historia en Educación Secundaria. Plan de Estudios 2018. SEP. www.dgesum.sep.gob.mx/public/planes2018/HIS0771.pdf.

Assertiveness, a key element to design conflict management strategies in students at Universidad Tecnológica de León

La asertividad, elemento clave para diseñar estrategias de gestión de conflictos en estudiantes de la Universidad Tecnológica de León

PADILLA-GUTIÉRREZ, Luz Aurora†, HERNÁNDEZ-CASTILLO, Adolfo, ARREDONDO-MUÑOZCANO, Ana María del Carmen and GONZÁLEZ-ARREDONDO, Liliana

Technological University of León, Mexico.

ID 1st Autho: *Luz Aurora, Padilla-Gutiérrez* / **ORC ID:** 0000-0003-4183-8777, **CVU CONACYT ID:** 1014262

ID 1st Co-author: *Adolfo, Hernández-Castillo* / **ORC ID:** 0000-00003-2105-1846, **CVU CONACYT ID:** 1014136

ID 2nd Co-author: *Ana María, Arredondo-Muñozcano* / **ORC ID:** 0000-0001-7252-6894, **CVU CONACYT ID:** 1014278

ID 3rd Co-author: *Liliana, González-Arredondo* / **ORC ID:** 0000-0002-1692-9602, **Researcher ID Thomson:** S-8366-2018, **CVU CONACYT ID:** 563829

Abstract

This article identifies elements to develop strategies that helps the teacher in the management of conflict in the classroom, so that the teaching-learning process is carried out in an environment of non-violence and peace. For this, a brief conceptual framework on conflict theory is proposed that justifies the establishment of three categories (communication, structure and personal variables) in order to serve as the basis for the design and application of a survey which was applied to the first semester students at Universidad Tecnológica de León (UTL), in the period September – December 2020. A synthesis of the survey results that highlighted the importance of assertiveness as a key element or tool for adequate conflict management is presented. Based on the results, the work concludes with the presentation of some elements for the development of didactic strategies that allow the adequate management of conflicts in the classroom.

Conflict, Communication, Assertiveness

Resumen

El presente artículo identifica elementos para elaborar estrategias que ayuden al docente en el manejo del conflicto en el aula, con la finalidad de que el proceso de enseñanza-aprendizaje se lleve a cabo en un ambiente de no violencia y paz. Para ello, se plantea un breve marco conceptual sobre la teoría del conflicto que justifica el establecimiento de tres categorías (Comunicación, estructura y variables personales) que sirvió de base para el diseño y aplicación de una encuesta que se aplicó al estudiantado de primer cuatrimestre de la Universidad Tecnológica de León (UTL), en el periodo septiembre – diciembre 2020. Se presenta una síntesis de los resultados de la encuesta que resaltaron la importancia de la asertividad como elemento clave o herramienta para el adecuado manejo de conflictos. A partir de los resultados, el trabajo concluye con la presentación de algunos elementos para el desarrollo de estrategias didácticas que permitan el manejo adecuado de los conflictos en el aula.

Conflicto, Comunicación, Asertividad

* Author correspondence (E-mail: apadilla@utleon.edu.mx)

† Researcher contributing as first author.

Introduction

Conflict is considered an aspect of human nature and cannot be avoided, so it is important to identify elements that help us mediate it and thus obtain positive aspects of it.

The widespread idea persists that conflict is destructive, and few speak of its potential for building a culture of peace. The origin of the term alludes precisely to its negative aspect: from the Latin *conflictus*, formed by the prefix *con*, which translates as company or union; and from the participle *flictus*, which means "blow", so when joining the elements you have: "blow together", which in the context in which the word arises refers to the blows propitiated between at least two people. Hence conflict is commonly associated with fighting, but that is only its explicit manifestation that can be expressed to varying degrees, from passive offense to war between nations.

The classroom is a propitious scenario to interact, doing team or groupwork, a situation that can lead to conflicts, and even more so when going through something atypical such as the Covid 19 pandemic. Therefore, it is important to complete studies that help identify key elements for the design of strategies that support teachers and students to mediate the conflicts that arise.

Problem statement

Understanding the sources of conflict is essential to address the problem at its root, and thus, build an environment of peace that avoids future conflicts or favorably resolves existing ones; in other words, prevent two or more people from getting into the fight. However, understanding the origin of conflict is a complex task, since it involves studying in depth the subject of all conflicts that by nature is complex: the human being.

Objective

Identifying elements that support the design of strategies for conflict management in the classroom, from the identification of the students' perception at Universidad Tecnológica de León.

Theoretical framework

In the period September-December 2020, a survey was applied with the Associate Professional Program in first quarter groups, with the intention of knowing their a *priori* perception of the conflict, to subsequently implement didactic strategies. To address the topic, first some aspects of the sociological theory of conflict will be briefly described, as a theoretical reference; subsequently, the contributions of Stephen P. Robbins in his analysis of conflicts in organizations will be reviewed. Below is a summary of the results of the survey applied to students and the categories of the proposals made by students for the conflict resolution strategy to, finally, conclude with a key element that should be included in the strategies and an outline of didactic proposal for conflict management and, thus, promote a culture of non-violence and peace.

Synthesis of conflict theory

Conflict theory has its origins in the ideas of Karl Marx. For this thinker, conflict is the result of the struggle for property, specifically between those who own the means of production (upper class) and those who only have their labor power (lower class). According to Marx, this struggle explains the historical evolution when he affirms "History is the history of the class struggle", where the upper classes have always sought at all costs to maintain their *status quo* by alienating the lower classes. According to this idea, conflict is inherent in social life, unless the lower class breaks this cycle and appropriates the means of production, thereby ending social classes and thus the source of conflict. Marx adds that, to achieve a classless society, the path is none other than a drastic revolution, which can even involve violence (Cadena, 2018).

Marx's position centered on property is typical of an industrial society, but it does not hold up in the post-industrial era, characterized by information science and technology that markedly blurs the social classes to which Marx referred.

PADILLA-GUTIÉRREZ, Luz Aurora, HERNÁNDEZ-CASTILLO, Adolfo, ARREDONDO-MUÑOZCANO, Ana María del Carmen and GONZÁLEZ-ARREDONDO, Liliana. Assertiveness, a key element to design conflict management strategies in students at Universidad Tecnológica de León. Journal Education Sciences. 2022

Dahrendorf (1992) observes that property alone is not sufficient to grant the political and social power necessary to perpetuate the alienating model of the upper class over the lower class. In post-industrial society we speak rather of groups of power and domination and dominated groups. For Dahrendorf (1992), a person has power when he is able to make himself obeyed, even by force; and you have dominance when you get the same thing, but by legal means. According to this new vision, conflict arises not from the difference in economic status, but from the social divergence between those who seek to perpetuate their capacity for power and dominance, and those who question those aspirations.

Marx and Dahrendorf maintain, in the end, the cyclical nature of conflict, that is, that to end the upper class (Marx) or the domination groups (Dahrendorf), the lower or dominated classes must rebel, there is no other way; but this idea of rebellion reaffirms the disruptive nature of conflict. Given this position, Lewis Coser (1970) in his book *New contributions to the theory of* social conflict analyzes conflict not only in its negative aspect, but highlighting its functionality for social stability. Among the functions of conflict, Coser highlights the connective and identifying function, that is, the possibility of establishing relationships among the members of a group, as well as interactions with another group. Thus arises the consciousness of group belonging: "We"; as well as the group of non-belonging: "the Others". The relationship between these groups is not necessarily one of power and dominance, sometimes the Others can be seen as role models. In other words, without conflict, cohesion among the members of a group would not be possible.

For his part, John Rex (1985) includes new variables to understand the mechanics of conflict: expectations, feelings and culture. Regarding expectations, the conflictive relationship arises in two phases: the first occurs when expectations are communicated; the second is when sanctions are imposed to enforce expectation. If one of the parties does not adequately communicate its expectations or they are interpreted negatively by the others, a crisis of legitimacy arises, which is complicated when, in addition, sanctions are established for compliance, since people will seek to reject compliance.

Faced with this situation, Rex speaks of "negotiation situations", in which rational arguments are necessary to convince others that there are higher interests that must be complied with and that, therefore, it is necessary to recognize the legitimacy of the leader. At this point, a key factor for negotiation is the favorable management of affective aspects, the use of feelings powerfully influences the management of conflict. Finally, Rex also recognizes that conflicts acquire different connotations according to the ideologies of each culture.

Conflict at the level of organizations

According to previous theories, it is clear that conflict is the result of interaction between two or more groups when the parties have different interests and expectations regarding the same issue. At the level of organizations, Robbins (2004) mentions that a conflict is a process where it is perceived that a party affected, affects or will affect some interest that is had. On the other hand, Funquen (2003) refers that conflict is the result of the incompatibility between objectives, behaviors or perceptions between people or groups that have opposite goals.

According to Robbins (2004), the origin of conflicts can be classified into three categories: communication, structure and personal variables.

Communication is the process where ideas, thoughts, and feelings are shared. Several elements are involved in this process: sender, receiver, channel, code and context. The **sender** is the one who sends the message; the **receiver** is the one who receives the message; the **context** is the set of physical, social, historical, psychological or cultural circumstances in which the communicative process occurs; the **message** is what you want to transmit to the other or others; the **channel,** that it is the vehicle (natural, such as oral, written or kinesthetic expression, or artificial as an electronic medium) by means of which the message is transmitted; The **code** is the set of symbols that are used to convey the message, such as language.

In each of the elements of the communicative process there may be a failure that prevents or hinders the purpose of communication. Both sender and receiver, for example, may have speech or hearing problems (physiological barriers). There is also difficulty if they do not use the same code, either because they do not share the language or do not understand the meaning of the words they use (semantic barriers). In the same vein, the communicative process would not be fully fulfilled if the contextual referent is different for each of the parties (cultural and social barriers); nor would communication occur if some physical obstacle distorts the channel and hinders the transmission or reception of the message (physical barriers).

The set of these barriers is called **noise**, in the sense that it interferes with the communication process. To achieve the purpose of communication, which is the exchange of ideas and feelings, **feedback** is necessary, not as the simple response of the receiver to the sender, but to verify if all participants understand the communicative intentions of all. When the receiver receives the initial message, he decodes and interprets what in his opinion the sender said, but this interpretation can be far from the communicative intention of the sender, because there may be a lot of noise (physiological, physical, cultural, semantic) and, if the pertinent clarifications are not made, the conflict arises that could evolve into violence. Feedback can help corroborate whether what you want to convey arrived correctly (Verderber, 2006).

The category of **structure**, according to Robbins (2004), refers to the clarity and compatibility of the objectives to be achieved, the goals to be met, the specialization of tasks assigned to the members, the rules, policies, clear and accepted norms and limits, leadership styles appropriate to the group's needs, degree and dependence among the members. If these elements, are not clear, accepted or in conformity, might cause continuous conflicts.

The **personal variables** are the value systems that each person has, they are the rules of social and moral conduct that the individual has. They are prejudices, in addition to the way of being that characterizes each individual and that makes him different from others. Robbins emphasizes that (Robbins, 2004, p. 400):

"…in studies of social conflict, the most important and perhaps the most ignored variable lies in the difference in value systems"

Methodology

The surveys were applied in the period September-December 2020, to 1,215 first-quarter students at Universidad Tecnológica de León (UTL), with the intention of identifying their perception of the conflict according to the categories indicated by Robbins[5], that is, to detect if most of their conflicts are due to personal or structural variables, from there, to design strategies for conflict management in the classroom.

Sample selection and application

The UTL received in its three campuses (Central, Campus II and Acámbaro) 3,000 new students to complete an enrollment of 8,532 in the quarter September- December 2020 (Source: UTL School Services, 2022). The sample was considered only with those of the first quarter since it was intended to know the perception of the conflict before implementing any strategy for its management, so that later they could identify if these strategies had a positive impact or not.

This survey was carried out in the Sociocultural Training course, a subject whose purpose is the formation of living-together and being skills. In the subject planning provided by the General Coordination of Technological Universities (CGUT by its acronym in Spanish), it is indicated that the competence to be developed by students at the end of the four modules of the subject, is (CGUT, 2018):

"Act with proactive, creative and entrepreneurial values and attitudes, in their personal, social, and organizational development, in harmony with their environment"

The first-quarter students of both shifts at Campuses I and II were requested by their Sociocultural course professors to answer the survey; thus, 1,215 out of 3,000 alumni answered the survey, which represented 40.5%, being in turn 14.24% of the student population if all quarters were considered. Only those from the Central Campus and those from Campus II, both located in León, Guanajuato, participated in this sample, and it was pending to include the 177 students of recent admission at Acámbaro Campus. The information is shown in Table 1. Sociodemographic data.

Students surveyed (out of 3000)	Gender		Shift		Campus	
1215	F (from 1321)	613	Morning	1038	Campus central	868
			Afternoon	154		
	M (from 1679)	602	Despressurized evening	23	Campus II	347
	Total	1215	Total	1215	Total	1215

Table 1 Sociodemographic data

Responses to identify elements that help in conflict management

The conflict perception survey consisted of 38 items; 37 multiple choice and 1 open-ended question. With the information obtained, the general results were analyzed, then items that provided information to identify necessary elements were grouped in the design of strategies for conflict management in the classroom. Finally, a classification was made based on the answers given to the open question: *"Do you have any proposal to improve the situation of the conflict presented among your classmates?"* The latter question was important because it defined the key element for the design of strategies, since it corroborated with the observations made in the analysis what the key element was in order to be implemented in the didactic strategies for conflict management.

Most students perceive conflict as something negative and that they should avoid it. According to the results, 81% of respondents responded that they associate it with the words fight, competition, dispute and/or disagreement, and only 19% as an area of opportunity. 69.7% answered that conflict generates more problems and 31.3% an opportunity. [1][2]

Action in the face of conflict

Almost 70% of the surveyed population considered that it is better to avoid conflict, with the aim of maintaining a good relationship in the group, and, in the event that they inevitably have to face the conflict, 76% said they would seek a solution that indicates commitment of the parties, 7% mentioned that they would seek help from third parties to solve it, 10% said they would maintain and defend their position, 6% would insist on ignoring the situation and not giving it importance, and only 1% said they would give up their position in order to end the conflict[3][4][5].

As for how to intervene, when students **detect** a conflict between their peers, 33.2% said they would [6] confront the parties in a neutral position, 36.5% said they would talk to each party involved separately, 23.2% prefer to ignore the fact and continue with their activities, 6% said they would try to take advantage of the situation for the benefit of all, and only 0.5% said they would try to profit for personal gain. When students are inevitably involved in a conflict, 80% of respondents said that they do face it, although it is unknown so far how they do it, that is, if passively, passive-aggressively, aggressively or assertively. [7]

Communication, control of emotions and personality

Regarding the variable "Communication", 61% of respondents mentioned that they promote dialogue between members of the group when a conflict is generated, 27% said that they promote it on some occasions, 8% mentioned that almost never and 5% that never. Another important aspect is the control of emotions in conflict and 95% of respondents mentioned that they agree with it. [8][9]

---

[1] Question 5. In your concept of conflict, you associate the word...

[2] Question 6. For you, a conflict generates ...

[3] Question 8. Conflict is a situation that we must avoid whenever possible.

[4] Question 11. You avoid conflict to maintain a good relationship with your group.

[5] Question 17. How do I act when I have a conflict with my group mates?

[6] Question 18. How do I act when I detect a conflict between my classmates in the UTL student community?

[7] Question 19. When there is a conflict in which you see yourself included, you face it.

[8] Question 21. You encourage dialogue between the members of your group if a conflict is generated...

They were also asked if personality influences the generation of conflict and 79% mentioned agreeing with this statement. [10]

Personal variables

Regarding whether beliefs about gender[11], social status[12], ideology[13] or perception of someone in the group[14], the responses showed a notorious "neither agree nor disagree". However, for the research team, it is necessary to work on these answers in a second moment, because with the information collected it is not possible to know how the students conceive these personal variables. What is highlighted is that 89% of the surveyed population were in complete agreement with the idea that in the middle of a conflict, the partners' rights must be respected, only 2% said no, and 9% preferred to maintain a neutral position.

Structure

It was mentioned earlier that structure refers to the establishment of objectives and rules, to the planning and distribution of work. 50% of respondents did consider that lack of planning[16] and disorganization[17] are definitely factors that generate conflicts. A very interesting question, that goes hand in hand with all this research, is the one that refers to virtual classes and their influence on generating disorganization in collaborative work and, therefore, giving rise to conflicts[18], almost 50% said they agreed.

Proposal by the students of strategies of solution or mediation in the face of the conflict

As the last item of the survey, the students were asked to make a proposal that could improve the situation of the conflict arising with their classmates; being an open question, the students proposed alternatives of all kinds which were classified into the following categories:

Category	Alumni(s)	%
They did not make a proposal	663	54.56%
Assertiveness	248	20.41%
Communication	111	9.13%
Structure	78	6.41%
Virtuality (return to face-to-face classes)	39	3.20%
Emotional intelligence	24	1.97%
Personal variables	24	1.97%
Activities of coexistence	19	1.15%
Request for mediators	9	0.74%
Total	1215	99.8%

Table 2 Categories of proposals by students for conflict resolution

According to the classification of proposals made by the students, assertiveness is the category that stands out for conflict management, and not only because it has been expressed explicitly, but because it is finally implicitly present in other categories: communication, structure, personal variables, coexistence activities and request for mediators.

Results

Assertiveness as a tool for conflict management

The communication strategies that are considered most effective are those related to assertiveness and active listening (Boqué, 2011). The objective of the assertive communication style is that the person is able to express themselves adequately when interacting, without attacking or allowing their rights to be respected (Generalitat Valencia, 2006).

According to Corrales, (2017) assertive communication has to do with the ability to express oneself verbally and preverbally in a way appropriate to culture and situations.

Professor Claudia Libertad Orta Caloca (2020), from the Universidad Autónoma de Tamaulipas, in her conference "Emotional assertiveness", in October 2020, directly relates assertiveness with emotional intelligence, as she mentions that in the nineties the concept of emotional intelligence emerged as an ability to recognize, perceive and value one's own emotions, as well as to regulate and express them at the right time and in a relevant way.

---

[9] Question 23. Controlling emotions is critical to conflict management.

[10] Question 24. Personality influences the generation of conflict.

PADILLA-GUTIÉRREZ, Luz Aurora, HERNÁNDEZ-CASTILLO, Adolfo, ARREDONDO-MUÑOZCANO, Ana María del Carmen and GONZÁLEZ-ARREDONDO, Liliana. Assertiveness, a key element to design conflict management strategies in students at Universidad Tecnológica de León. Journal Education Sciences. 2022

Which contributes to the person generating attitudes and thoughts that strengthen self-esteem as an instrument of healthy defense in their right to live with quality in any social context. Then, an assertive behavior implies acting with transparency, honesty and harmony that consciously and unconsciously is being communicated to others, through their opinions and ideas, but does not harm a third party.

According to the above, the conflicts that arise in the classroom, both face-to-face and virtual, in times of pandemic or not, require that the parties involved be assertive, that they have adequate and effective communication, that everyone's opinions are heard and respected; and in this way reach agreements. Communication plays an important role, hence it is required to be **assertive**, and this is the key piece as a tool to achieve actions that help the management or mediation of the conflict. This reaffirms what is mentioned in the fourth pillar of education *Learning* to live together that refers to knowing how to live with the people around, to developing interrelation skills (Barragán, 2019).

The origin of the word assertiveness is from the Latin *asserere* and *assertum*, which means to **affirm or defend** according to Robredo (1995). Therefore, an assertive person is sure of what he says and defends what he feels or thinks, always respecting the rights of others.

When the person does not affirm or defend his rights, we speak of passive behavior; whereas, on the contrary, if you assert or defend your rights by trampling on the rights of others, it is aggressive behavior. The middle point is assertive behavior, which expresses what you feel and believe in a clear and honest way, asserting your own rights as those of others (Gaeta, 2009). According to Coromac (2014), assertiveness supports relationships to be more functional, direct and authentic. There is a work carried out by the Ministry of Education (MINEDUC, 2011), where they propose that assertiveness allows citizens to communicate their feelings and ideas, defend their rights, raise their needs and interests respecting others and themselves, so assertiveness, in addition to helping in the mediation of the conflict also supports the exercise of one's own rights and respect those of others. (Coromac, 2014)

The Ministry of Labor and Social Affairs of Spain (2004) mentions:

> "Assertive behavior does not always result in the absence of conflict between the two parties, but its objective is the potentiation of favorable consequences and the minimization of unfavorable ones."

Rocío Raquel de León M. (2016) in her thesis entitled "Assertive discipline and the development of skills for coexistence" mentions that assertive discipline is very convenient because it favors the promotion of respect to others, dialogue, affective bonds, teamwork, assuming responsibilities and commitments and firmness of character.

Assertiveness includes a series of rights, among which are: consider your own needs, change your mind, express your ideas and feelings, say no to a request, without feeling guilty, be treated with respect and dignity, make mistakes, ask and give when you decide, establish your priorities and your own decisions, feel good, succeed, have privacy, reciprocate, demand the agreed quality and be happy (Ministry of Labour and Social Affairs. Spain, 2004).

There are several assertive techniques. According to the Ministry of Labour and Social Affairs of Spain and the Generalitat, they mention, among others, the following techniques: scratched record (insist on our assertive rights), fog bank (identify at least one point of agreement with our interlocutor), viable commitment (agreements that agree to the parties without implying waiving our assertive rights), negative acceptance (accepting criticism at first without allowing our rights to be violated), positive acceptance (express recognition of the qualities of the other), questioning or assertive question (to identify the interlocutor's intention or motives).

Elements to develop a didactic strategy based on assertiveness for conflict management

It is clear that assertiveness is the key tool for conflict management in the classroom. However, acquiring the ability to be assertive does not occur with the simple explanation of the term, because it is not only a conceptual aspect, but procedural and attitudinal.

PADILLA-GUTIÉRREZ, Luz Aurora, HERNÁNDEZ-CASTILLO, Adolfo, ARREDONDO-MUÑOZCANO, Ana María del Carmen and GONZÁLEZ-ARREDONDO, Liliana. Assertiveness, a key element to design conflict management strategies in students at Universidad Tecnológica de León. Journal Education Sciences. 2022

That is why it is necessary to systematically implement a set of teaching-learning activities, that is, a didactic strategy, so that this behavior becomes a fundamental part of the students' training. It is not the purpose of this work to develop the didactic strategy for conflict management, but to consider the elements that can serve as a framework for the design of didactic strategies whose purpose is to promote assertive behavior, that is, within communication, structure and personal variables.

In terms of communication, there are two aspects that can be considered in the design of a didactic strategy. According to Lewis Coser, the presence of a conflict between groups generates a series of benefits within them, such as the sense of belonging and social cohesion from the development of social skills. If this functionality of the conflict is transferred to a learning scenario, that allows, for example, to form teams with some pressure to compete with others, but taking care not to encourage aggressive attitudes (such as winning at the cost of humiliating the other team), or passive (letting themselves win), but, on the contrary, to develop the ability to generate agreements of coexistence between the parties. Conflict arises when the communication process is affected by physiological, semantic or cultural barriers. In this sense, different evaluation instruments can be designed for different activities that allow the recognition of barriers, as well as the strategies implemented for their management, in such a way as to guarantee adequate communication.

In terms of structure, the didactic strategy would consist of the members of each team learning to write objectives and goals, establish rules or policies for team performance and define clear criteria for the assignment of functions and tasks. This element would seek to promote assertive behavior through the development of negotiation and leadership skills.

As for personal variables, it would seek to promote activities that allow the recognition of one's own value systems, the ability to communicate them, as well as respect for the hierarchy of values of others. Some activities that may include personal variables are the discussion or debate board.

Being assertive is not achieved as if it were a cooking recipe that is followed to the letter, you must constantly practice the different techniques that exist to identify which is the most appropriate according to the situation.

Being assertive should be seen as a virtue and everyone who wants to be virtuous in something must practice it constantly and surpass himself all the time. You must be aware that the work of being assertive is in each person, but the teacher is the one who must set the example and promote this behavior in the classroom, so that the students identify that under respect and empathy to the other can overcome conflicts, here would apply the phrase "*the word convinces, but the example drags.*"

Discussion

According to the analysis that was carried out, assertiveness may seem the panacea for conflict management, but it must be corroborated that teachers and students clearly identify what having an assertive behavior refers to because there are very thin or unclear lines in passive or aggressive behaviors that students or teachers will think are in the right.

The implementation of assertiveness as an element for the management of conflicts in the classroom, will not be an easy task, since it must be accompanied by previous strategies to implement it, such as sensitization to the teacher to identify the importance of doing it, training to know, do and be of this competence, in addition to considering other elements to make it really effective, As is the strengthening of emotional intelligence, effective communication, organization-structure of class and projects, in addition to accompanying the teachers in this process so that they in turn can guide the students.

According to the results, it will also be of great importance to carry out actions so that students change their perception regarding the conflict since they mostly avoid it because they relate it to something negative, in this sense it would be interesting to carry out an analysis through interviews where the answers of the students in this regard are addressed in greater depth.

The teachers'opinion would also be of great help to identify if it agrees that assertiveness is an indispensable element to develop supporting communication and organization strategies in their daily activities and projects to be developed with the students, and thus, be able to minimize or manage the conflict that may arise.

Conclusions

Acquiring assertive behavior and, consequently, the ability to prevent and properly manage conflicts requires a systematized practice, that is, as part of a didactic strategy. The main advantage of these elements is their flexibility to adapt to any subject, since it is not about including the issue of assertiveness as such, but about generating didactic activities that have assertiveness as a tool that promotes the generation of agreements and the ability to resolve conflicts.

At all times of life people will face conflict, it is inevitable, the interesting thing about it is to discover how to solve it or take advantage of it, not to identify it as something negative, but as a learning opportunity. Identifying what is triggering the conflict, communication, structure, personal variables or a combination of them, will greatly help to develop viable and effective strategies for its solution. Currently we are going through an atypical situation such as a pandemic, which detonated conflicts in different areas of our lives, and education was no exception, so it is important to identify strategies that help overcome conflicts that arise in the classroom: virtual or face-to-face, and according to the analysis carried out and the survey applied to the students at Universidad Tecnológica de León, in Guanajuato, Mexico, assertiveness is identified as the most viable and applicable element in any conflict situation in developing strategies.

References

Barragán, N., Evangelista, I., y Chaparro, P. (2019). Una interpretación desde la perspectiva de la hermenéutica analógica: la educación basada en la convivencia. *IE Revista de investigación educativa de la REDIECH, 10*(18), 193-206. https://doi.org/10.33010/ie_rie_rediech.v1 0i18.519

Boqué, M., Alguacil de Nicolás, M., y Pañellas Valls, M. (2011). Estrategias de comunicación interpersonal en la participación estudiantil universitaria. *International Journal of Developmental and Educational Psychology, 3*(1),307-314 https://www.redalyc.org/articulo.oa?id=349832 330031

Cadena Vargas, E. (2018). La teoría del conflicto: esbozo de síntesis. *Convergencia Revista De Ciencias Sociales*, (2). https://convergencia.uaemex.mx/article/view/10 438

Coordinación General de Universidades Tecnológicas. (2018). *Hoja de asignatura del módulo de Formación sociocultural IV.* Universidades Tecnológicas https://uttecam.edu.mx/eduma/w p-content/uploads/2018/12/9.- Formaci%C3%B3n-Sociocultural-IV.pdf

Coromac, S. (2014). *Estrategias de asertividad como herramientas para la transformación del conflicto en el aula.* [Tesis de Maestría, Universidad Rafael Landívar de Guatemala] Archivo digital. http://biblio3.url.edu.gt/Tesario/2014/05/67/Cor omac-Maria.pdf

Corrales, A., Quijano, N., y Góngora, E. (2017). Empatía, comunicación asertiva y seguimiento de normas. Un programa para desarrollar habilidades para la vida. *Enseñanza e Investigación en Psicología, Consejo Nacional para la Enseñanza en Investigación en Psicología. 22* (1), 58-65 https://www.redalyc.org/pdf/292/29251161005. pdf ISSN: 0185-1594.

Coser, L. (1970). *Nuevos aportes a la teoría del conflicto social.* AMORRORTU

Dahrendorf, R. (1992). *Hacia una teoría del conflicto social.* Fondo de Cultura Económica.

De León, R. (2016). *Disciplina asertiva y la práctica de la responsabilidad.* [Tesis de licenciatura para la Universidad Rafael Landívar, Guatemala] Quetzaltenango, http://recursosbiblio.url.edu.gt/tesiseortiz/2016/ 05/09/De-Leon-Rocio.pdf

Funquen, M. (2003). Los conflictos y las formas alternativas de resolución. *Tabula rasa (1),* 265-278. https://www.redalyc.org/articulo.oa?id=396001 14

Gaeta, L. y Galvanovskis A. (2009). Asertividad: un análisis teórico-empírico. *Enseñanza e Investigación en Psicología, 14* (2), 403-425. https://www.redalyc.org/articulo.oa?id=292119 92013

Generalitat. (2006). Técnicas de comunicación en Enfermería. Técnicas de comunicación para profesionales de enfermería. *Generalitat Valencia* https://www.aeesme.org/wp-content/uploads/2014/11/Tecnicas-de-comunicacion-en-Enfermeria.pdf

Ministerio de Educación (2011). *Guía para la identificación y prevención del acoso escolar (bullying).* https://www.sdgfund.org/sites/default/files/CPP B_GUIA_Guate_Prevencion%20acoso%20esco lar.pdf

Ministerio de Trabajo y Asunto sociales de España. (2004). *La conducta asertiva como habilidad social.* https://www.insst.es/documents/94886/326775/ ntp_667.pdf/0c56eb86-4771-4545-adab-59bd972cce41

Orta, C. (2020). La importancia de la asertividad emocional en la educación y en la vida diaria. *Boletín informativo FADYCS Facultad de Derecho y Ciencias Sociales.* https://fadycs.uat.edu.mx/20268.html

Rex, J. (1992). *El conflicto social.* Siglo XXI de España Editores.

Robbins, S. (2004). *Comportamiento organizacional.* (10ª. Edición). Pearson Prentice Hall.

Robredo, C. (1995). *La tolerancia a la frustración en relación al grado de asertividad que tienen los vendedores comisionistas de apartados electrodomésticos.* [Tesis de licenciatura para la Universidad Femenina de México, escuela de Psicología. México, D.F.]. Archivo digital http://132.248.9.195/pmig2016/0232333/02323 33.pdf

Verderver, R. y Verderber K. (2006). *¡Comunícate!* (11ª edición). Thomson.

[Title in Times New Roman and Bold No. 14 in English and Spanish]

Surname (IN UPPERCASE), Name 1st Author†*, Surname (IN UPPERCASE), Name 1st Coauthor, Surname (IN UPPERCASE), Name 2nd Coauthor and Surname (IN UPPERCASE), Name 3rd Coauthor

Institutional Affiliation of Author including Dependency (No.10 Times New Roman and Italic)

International Identification of Science - Technology and Innovation

ID 1st Author: (ORC ID - Researcher ID Thomson, arXiv Author ID - PubMed Author ID - Open ID) and CVU 1st author: (Scholar-PNPC or SNI-CONACYT) (No.10 Times New Roman)

ID 1st Coauthor: (ORC ID - Researcher ID Thomson, arXiv Author ID - PubMed Author ID - Open ID) and CVU 1st coauthor: (Scholar or SNI) (No.10 Times New Roman)

ID 2nd Coauthor: (ORC ID - Researcher ID Thomson, arXiv Author ID - PubMed Author ID - Open ID) and CVU 2nd coauthor: (Scholar or SNI) (No.10 Times New Roman)

ID 3rd Coauthor: (ORC ID - Researcher ID Thomson, arXiv Author ID - PubMed Author ID - Open ID) and CVU 3rd coauthor: (Scholar or SNI) (No.10 Times New Roman)

Abstract (In English, 150-200 words)

Objectives
Methodology
Contribution

Keywords (In English)

Indicate 3 keywords in Times New Roman and Bold No. 10

Abstract (In Spanish, 150-200 words)

Objectives
Methodology
Contribution

Keywords (In Spanish)

Indicate 3 keywords in Times New Roman and Bold No. 10

---

* Correspondence to Author (example@example.org)
† Researcher contributing as first author.

Introduction

Text in Times New Roman No.12, single space.

General explanation of the subject and explain why it is important.

What is your added value with respect to other techniques?

Clearly focus each of its features

Clearly explain the problem to be solved and the central hypothesis.

Explanation of sections Article.

## Development of headings and subheadings of the article with subsequent numbers

[Title No.12 in Times New Roman, single spaced and bold]

Products in development No.12 Times New Roman, single spaced.

Including graphs, figures and tables-Editable

In the article content any graphic, table and figure should be editable formats that can change size, type and number of letter, for the purposes of edition, these must be high quality, not pixelated and should be noticeable even reducing image scale.

[Indicating the title at the bottom with No.10 and Times New Roman Bold]
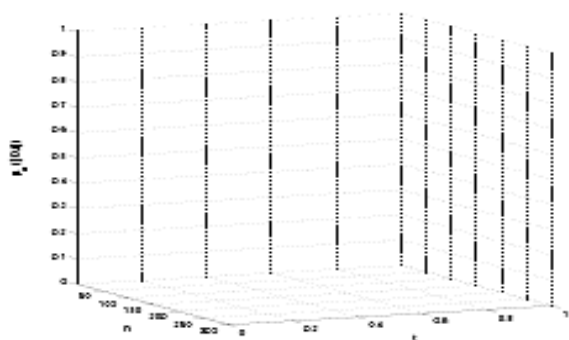
Graphic 1 Title and *Source (in italics)*

Should not be images-everything must be editable.
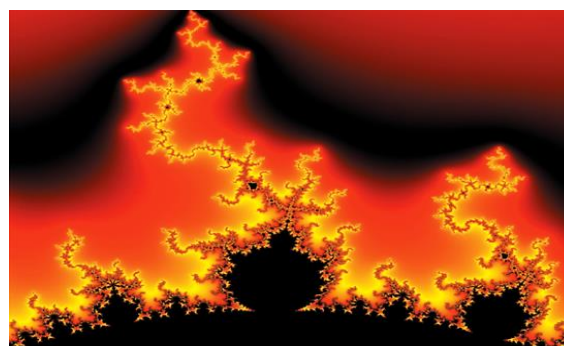
Figure 1 Title and *Source (in italics)*

Should not be images-everything must be editable.

Table 1 Title and *Source (in italics)*

Should not be images-everything must be editable.

Each article shall present separately in **3 folders**: a) Figures, b) Charts and c) Tables in .JPG format, indicating the number and sequential Bold Title.

For the use of equations, noted as follows:

$$Y_{ij} = \alpha + \sum_{h=1}^{r} \beta_h X_{hij} + u_j + e_{ij} \qquad (1)$$

Must be editable and number aligned on the right side.

Methodology

Develop give the meaning of the variables in linear writing and important is the comparison of the used criteria.

Results

The results shall be by section of the article.

Annexes

Tables and adequate sources

Thanks

Indicate if they were financed by any institution, University or company.

Conclusions

Explain clearly the results and possibilities of improvement.

References

Use APA system. Should not be numbered, nor with bullets, however if necessary numbering will be because reference or mention is made somewhere in the Article.

Use Roman Alphabet, all references you have used must be in the Roman Alphabet, even if you have quoted an Article, book in any of the official languages of the United Nations (English, French, German, Chinese, Russian, Portuguese, Italian, Spanish, Arabic), you must write the reference in Roman script and not in any of the official languages.

Technical Specifications

Each article must submit your dates into a Word document (.docx):

Journal Name
Article title
Abstract
Keywords
Article sections, for example:

1. Introduction
2. Description of the method
3. Analysis from the regression demand curve
4. Results
5. Thanks
6. Conclusions
7. References

Author Name (s)
Email Correspondence to Author
References

Intellectual Property Requirements for editing:

- Authentic Signature in Color of <u>Originality Format</u> Author and Coauthors.

- Authentic Signature in Color of the <u>Acceptance Format</u> of Author and Coauthors.

- Authentic Signature in blue colour of the <u>Conflict of Interest Format</u> of Author and Co-authors.

Reservation to Editorial Policy

Journal Education Sciences reserves the right to make editorial changes required to adapt the Articles to the Editorial Policy of the Research Journal. Once the Article is accepted in its final version, the Research Journal will send the author the proofs for review. ECORFAN® will only accept the correction of errata and errors or omissions arising from the editing process of the Research Journal, reserving in full the copyrights and content dissemination. No deletions, substitutions or additions that alter the formation of the Article will be accepted.

Code of Ethics - Good Practices and Declaration of Solution to Editorial Conflicts

Declaration of Originality and unpublished character of the Article, of Authors, on the obtaining of data and interpretation of results, Acknowledgments, Conflict of interests, Assignment of rights and Distribution

The ECORFAN-Mexico, S.C. Management claims to Authors of Articles that its content must be original, unpublished and of Scientific, Technological and Innovation content to be submitted for evaluation.

The Authors signing the Article must be the same that have contributed to its conception, realization and development, as well as obtaining the data, interpreting the results, drafting and reviewing it. The Corresponding Author of the proposed Article will request the form that follows.

Article title:

–   The sending of an Article to Journal Education Sciences emanates the commitment of the author not to submit it simultaneously to the consideration of other series publications for it must complement the Format of Originality for its Article, unless it is rejected by the Arbitration Committee, it may be withdrawn.

–   None of the data presented in this article has been plagiarized or invented. The original data are clearly distinguished from those already published. And it is known of the test in PLAGSCAN if a level of plagiarism is detected Positive will not proceed to arbitrate.

–   References are cited on which the information contained in the Article is based, as well as theories and data from other previously published Articles.

–   The authors sign the Format of Authorization for their Article to be disseminated by means that ECORFAN-Mexico, S.C. In its Holding Republic of Peru considers pertinent for disclosure and diffusion of its Article its Rights of Work.

–   Consent has been obtained from those who have contributed unpublished data obtained through verbal or written communication, and such communication and Authorship are adequately identified.

–   The Author and Co-Authors who sign this work have participated in its planning, design and execution, as well as in the interpretation of the results. They also critically reviewed the paper, approved its final version and agreed with its publication.

–   No signature responsible for the work has been omitted and the criteria of Scientific Authorization are satisfied.

–   The results of this Article have been interpreted objectively. Any results contrary to the point of view of those who sign are exposed and discussed in the Article.

Copyright and Access

Article Title:

Name and surnames of the contact author and the co-authors	Signature
1.	
2.	
3.	
4.	

Principles of Ethics and Declaration of Solution to Editorial Conflicts

Editor Responsibilities

The Publisher undertakes to guarantee the confidentiality of the evaluation process, it may not disclose to the Arbitrators the identity of the Authors, nor may it reveal the identity of the Arbitrators at any time.

The Editor assumes the responsibility to properly inform the Author of the stage of the editorial process in which the text is sent, as well as the resolutions of Double-Blind Review.

The Editor should evaluate manuscripts and their intellectual content without distinction of race, gender, sexual orientation, religious beliefs, ethnicity, nationality, or the political philosophy of the Authors.

The Editor and his editing team of ECORFAN® Holdings will not disclose any information about Articles submitted to anyone other than the corresponding Author.

The Editor should make fair and impartial decisions and ensure a fair Double-Blind Review.

Responsibilities of the Editorial Board

The description of the peer review processes is made known by the Editorial Board in order that the Authors know what the evaluation criteria are and will always be willing to justify any controversy in the evaluation process. In case of Plagiarism Detection to the Article the Committee notifies the Authors for Violation to the Right of Scientific, Technological and Innovation Authorization.

Responsibilities of the Arbitration Committee

The Arbitrators undertake to notify about any unethical conduct by the Authors and to indicate all the information that may be reason to reject the publication of the Articles. In addition, they must undertake to keep confidential information related to the Articles they evaluate.

Any manuscript received for your arbitration must be treated as confidential, should not be displayed or discussed with other experts, except with the permission of the Editor.

The Arbitrators must be conducted objectively, any personal criticism of the Author is inappropriate.

The Arbitrators must express their points of view with clarity and with valid arguments that contribute to the Scientific, Technological and Innovation of the Author.

The Arbitrators should not evaluate manuscripts in which they have conflicts of interest and have been notified to the Editor before submitting the Article for Double-Blind Review.

Responsibilities of the Authors

Authors must guarantee that their articles are the product of their original work and that the data has been obtained ethically.

Authors must ensure that they have not been previously published or that they are not considered in another serial publication.

Authors must strictly follow the rules for the publication of Defined Articles by the Editorial Board.

The authors have requested that the text in all its forms be an unethical editorial behavior and is unacceptable, consequently, any manuscript that incurs in plagiarism is eliminated and not considered for publication.

Authors should cite publications that have been influential in the nature of the Article submitted to arbitration.

Information services

Indexation - Bases and Repositories

LATINDEX (Scientific Journals of Latin America, Spain and Portugal)
EBSCO (Research Database - EBSCO Industries)
RESEARCH GATE (Germany)
GOOGLE SCHOLAR (Citation indices-Google)
MENDELEY (Bibliographic References Manager)
HISPANA (Information and Bibliographic Orientation-Spain)

Publishing Services

Citation and Index Identification H
Management of Originality Format and Authorization
Testing Article with PLAGSCAN
Article Evaluation
Certificate of Double-Blind Review
Article Edition
Web layout
Indexing and Repository
ArticleTranslation
Article Publication
Certificate of Article
Service Billing

Editorial Policy and Management

1047 La Raza Avenue -Santa Ana, Cusco-Peru. Phones: +52 1 55 6159 2296, +52 1 55 1260 0355, +52 1 55 6034 9181; Email: contact@ecorfan.org www.ecorfan.org

Journal Education Sciences

"Virtual education, an engine to increase learning in the pandemic"
MONCADA-RODRÍGUEZ, Gloria Rebeca, VILLARREAL-SOTO, Blanca Margarita, ESPERICUETA-MEDINA, Marta Nieves and GONZÁLEZ-CEPEDA, María Cristina
Universidad Autónoma de Coahuila

"Teachers in training; post-pandemic challenges in the professional practice"
CHÁVEZ-ALBA, Romelia, ORDÓÑEZ-SUÁREZ, Teresa, CHÁVEZ-ALBA, Enied Cuitláhuac and MARTÍNEZ-ROCHA, Diana Itzel
Escuela Normal Superior Federal de Aguascalientes "Profr. José Santos Valdés"
Escuela Normal de Atlacomulco "Profesora Evangelina alcántara Díaz"

"Follow-up of graduates, an institutional program that should be the hallmark of a Public Teacher Training College in the State of Mexico"
MENDOZA-GONZÁLEZ, Nancy, FUENTES-FAVILA, Luis Macario, MOLINA-VÁZQUEZ, Gabriel and ORDÓÑEZ-SUÁREZ, Teresa
Escuela Normal de Atlacomulco "Profesora Evangelina alcántara Díaz"

"Assertiveness, a key element to design conflict management strategies in students at Universidad Tecnológica de León"
PADILLA-GUTIÉRREZ, Luz Aurora, HERNÁNDEZ-CASTILLO, Adolfo, ARREDONDO-MUÑOZCANO, Ana María del Carmen and GONZÁLEZ-ARREDONDO, Liliana
Technological University of León

ISSN 2523-2436

www.ecorfan.org