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The works must be unpublished and refer to topics of education, crowdsourcing, operation of academics corps, regional development, fiscal, architecture, networks and other topics related to Social Sciences.

Presentation of the Content

In volume eight issue fourteen, as the first article we present, *Social responsibility in professional accounting training*, by CUSIMAYTA-QUISPE, Magna Asiscla & DELGADO-PIZARRO, César Augusto, with secondment in the Universidad Andina del Cusco, as a second article we present, *The motivation to study of the student in security sciences and forensic sciences*, by LUCIO, Rodolfo & SESENTO, Leticia, with an appointment at the Universidad Michoacana de San Nicolás de Hidalgo and Colegio Primitivo y Nacional de San Nicolás de Hidalgo, as a third article we present, *A comparative study on the challenges of developing the writing skill: english language and nahuatl language*, by ROMÁN, Edgar, RODRÍGUEZ, Verónica, MARTÍNEZ, Jorge and MATA, Karla, with secondment at the Universidad Veracruzana, as fourth article we present, *Education, entrepreneurship and the environment*, by LANDIN-ALCANTAR, Herlinda, VAZQUEZ-MIRAMONTES, Nicolás, MARIN-OROZCO, Emmanuel Rodrigo and PALOMINO-NUÑEZ, Sergio Joel, with secondment at the Universidad de Guadalajara.

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Social responsibility in professional accounting training

Responsabilidad social en la formación profesional de contabilidad

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Abstract

Social responsibility in the academic training of the public accountant within the framework of the fulfillment of the accountability roles of the State, the company and other organizations, to society; it is particularly relevant for peace and social cohesion. The study was carried out at the Professional Accounting School of the Andean University of Cusco – Perú (UAC) with a non-experimental qualitative approach, to facilitate the knowledge of the perception of accounting professionals regarding the exercise of their activity; the data collection technique was the survey and the semi-structured interview. The results show that the public accountant, in the performance of the work emphasizes efficiency; the valuation of his ethical principles; and, in the responsible contribution to the related areas within the organization; as well as incipiently to the preservation of natural resources for a healthy environment. It is concluded that in relation to social responsibility, the accounting professional contributes from their perspective in efficiency, transparency and in support to other areas of the organization and also, still tenuously, to the preservation of the environment.

Social responsibility, Public accountant, Accounting

Resumen

La responsabilidad social en la formación académica del contador público en el marco del cumplimiento de los roles de rendición de cuentas del Estado, la empresa y otras organizaciones, a la sociedad; es particularmente relevante para la paz y la cohesión social. El estudio se realizó en la Escuela Profesional de Contabilidad de la Universidad Andina del Cusco (UAC) con el enfoque cualitativo no experimental, para facilitar el conocimiento de la percepción de profesionales de contabilidad respecto al ejercicio de su actividad; la técnica de recolección de datos fue la encuesta y la entrevista semiestructurada. Los resultados muestran que el contador público, en el desempeño de la labor hace hincapié en la eficiencia; la valoración de sus principios éticos; y, en la contribución responsable a las áreas vinculadas dentro de la organización; así como incipientemente a la preservación de los recursos naturales para un ambiente saludable. Se concluye que en relación con la responsabilidad social el o la profesional en contabilidad, aporta desde su perspectiva en la eficiencia, la transparencia y en el apoyo a otras áreas de la organización y también, tenuemente todavía, a la preservación del ambiente.

Responsabilidad social, Contador público, Contabilidad

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† Researcher contributing as first author.

Introduction

47 years ago, the practice of the public accountant profession focused on taxation, where accounting was carried out manually as an obligation with little control by the State. Companies often replaced him with the commercial accountant, since his signature was recognized as valid in accounting and tax processes. Many of the business organizations were looking for the accountant who would find a way to pay the least amount to the treasury.

In the current context, the exercise of the profession of public accountant is focused on tax obligations, where accounting is mechanized and online, it is mandatory and carried as an obligation with strong control by the State, particularly by the National Superintendency of Tax Administration - Sunat. Companies prefer the accountant, who punctually complies with tax obligations; They are deeply uncomfortable with non-compliance or knowing that they have been notified of debts or even fines.

This new market demand for goods and services generated changes in the training of those who chose to pursue a professional career as a public accountant. Like the introduction of learning in action, in so many years ago, the training was extremely theoretical, with a gap between what was taught in the classrooms and what was needed in the workplace in a context of increasing appropriation of new computer technologies. Although these new tools were procedurally favorable, it was not addressed yet from university education, how the daily work of the person specialized in accounting contributes to social change -understood this as the full fulfillment of people's rights- from access universal to the opportunities offered by the development of a territory with a democratic government immersed in a social market economy.

In Peru, the previous University Law, Law 23733 (December 17, 1983), considered as a fundamental role of the university the development of actions of social projection and university extension, as an educational proposal of promotion and cultural diffusion and professional studies specific that were extended in favor of those who were not regular students; in some occasions these were free and in others they led to a paid certification.

But, social responsibility, as such, was recently incorporated into the University Law, Law 30220 (July 9, 2014, article 124), where it is conceptualized as: The ethical and effective management of the impact generated by the university on society due to the exercise of their functions: academic, research and extension services and participation in national development (...); includes the management of the impact produced by the relations between the members of the university community, on the environment, and other interested organizations (...).

The Education Commission of the Inter-American Accounting Association - CE AIC (2015), emphasizes social change, having to overcome, for this, the academic mechanical models, in favor of environmentally sustainable development, citizen participation and putting knowledge at the service of the human being.

The World Conference on Higher Education (CMES, 2009), Unesco, in response to the demands that redefine the mission and work of higher education institutions (IES), considered social responsibility as: "one of the pillars of the new world agenda for higher education to enhance its contribution to the eradication of poverty and sustainable development".

In this framework, an unsolved problem is the negative situation generated by the omission of responsibilities; the State that many times does not comply with rendering accounts to taxpayers about the destination and use of taxes despite the existence of the necessary technology; the taxpayer who does not make available to his clients the information on the payment of his taxes and the efficient and pertinent use of his resources in favor of the transparency and sustainability of the resources he uses; and society, while maintaining a weak organized participation to favor the fulfillment of their rights.

Objective

Determine the most relevant factors in the academic training of the public accountant in relation to social responsibility, within the framework of the fulfillment of the accountability roles of the State, the company and other organizations, to society.

Methodology

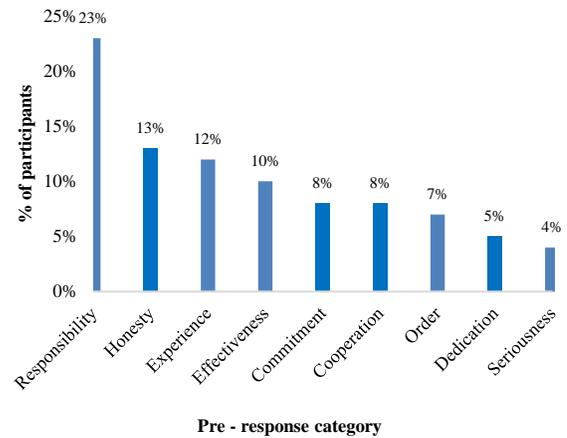
According to the Consortium of Communication for Social Change (2008), a descriptive, non-experimental qualitative approach was used that made it possible to measure the perception of directors, managers or owners of companies or entities about the performance of the accountant public, in your organization. The study sample was non-probabilistic and intentional, which consisted of a group of 84 businessmen or company workers linked to the professional activities of public accountants.

The data collection technique was the survey and interview whose purpose was to obtain answers to the questions: How is the performance of the accountant or public accountant at work? What contribution do you value most from their work in your company or entity? How does their performance, in the work of the company, entity or organization, contribute to the community and their livelihood? The instrument for data collection used was the survey and interview form sent to the selected group via email and supplemented with open questions through calls via mobile phone.

Results and Discussion

Based on the surveys and interviews, the tabulation, processing and validation of the information collected from the 84 interviewees who are working in companies, entities, or who support the public accountant from a close environment were carried out; starting from the grouping of the initial response pre-categories from a performance perspective of the work of the public accountant, within the framework of social responsibility, supporting the analysis in the concepts that refer to cognition, procedures, attitude and experience in the context of continuous learning or "yachasun" as it is called in Quechua, the ancestral language of the Incas and widely used in the Andean territory of Peru.

Graphic 1 illustrates the results of the question: How is the performance of the accountant or public accountant at work? the efficient sub-category obtained 26%, followed by responsibility with 18%, timely management, 13% and, to a lesser extent, teamwork 3%.



Graphic 1 Pre-response categories on the performance of the public accountant

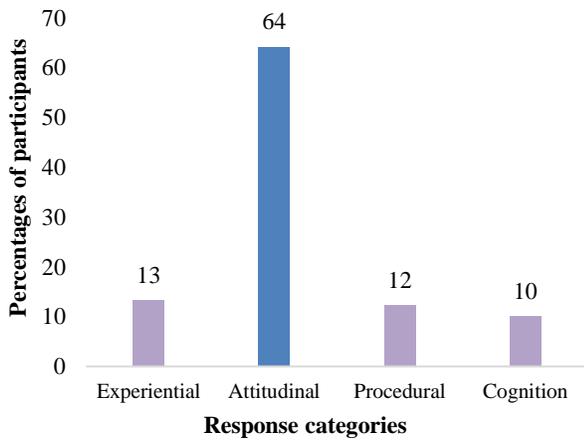
Source: Own elaboration with data from the survey and interview

These response pre-categories show various attitudinal aspects that have a strong influence on the professional practice of the accountant or public accountant, in an intercultural context where the concepts of "munay", "llank'ay" and "yachay, which are rooted are rooted. However, little is addressed in academic training with clear orientations to the full fulfillment of the person, while for now the emphasis is on productivity criteria.

The answers to the question shown in Graphic 1 emphasize the "munay" whose meaning in Quechua expresses affection, affection and the will of the people towards a visit, friendship or family. So munaway, it is translated as love me; Munayki, how I love them and Munani Llactayta is, I love my people or community; more social responsibility in practice is expressed in the Ayni, which leads to reciprocity, collaboration and mutual cooperation.

The results show that the empathy and trust that are generated around the exercise of the profession, facilitate the understanding of the institutional or organizational purposes that precisely cause an impact on the population to which the university academic action contributes. The result of Graphic 1 focuses on the attitudinal pre-categories that comprise "the ways in which values are expressed in concrete situations and in the teleological horizon of human actions, that is, these are individual dispositions that allow reactions to other people" (Céspedes and Cossio, 2015).

In summary, the pre - response categories around the question, how is the performance of the accountant or public accountant at work? they were condensed, according to their intrinsic characteristics and intercultural connotation, into: experiential, attitudinal, procedural and cognition.

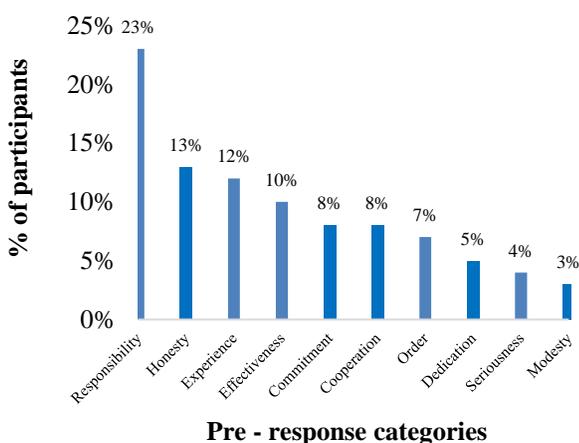


Graphic 2 Response categories on the performance of the public accountant

Source: Own elaboration with data from the survey and interview

Graphic 2 shows that 64% of those interviewed value in different ways, the attitudinal aspect of the public accountant in the performance of their professional work, however this factor is little worked on in the educational training curricula within the university; Although it has been incorporated as a component of the evaluation of social responsibility subjects, it does not have validated content and an effective contribution to its objective and even less aspects related to attitude in the performance of the professional function.

In Graphic 3 the results on the question are shown. What do you value more about the public accountant who is in the company or entity? Responsibility was valued with 23%, honesty in 13%, experience in 12% and humility with the lowest valuation with 3%.



Graphic 3 Pre-response categories on what you value most of the public accountant

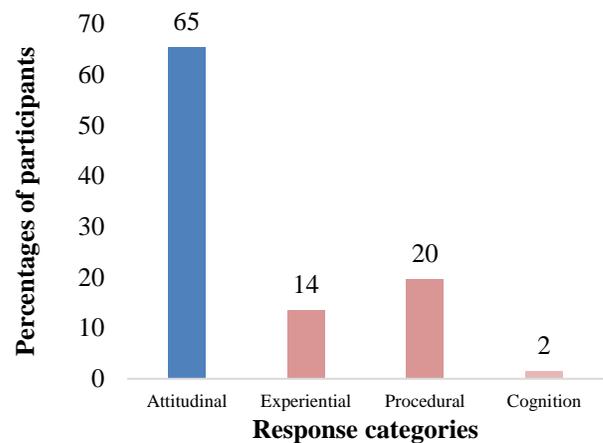
Source: Own elaboration with data from the survey and interview

In relation to Graphic 3, although the professional deontology course is incorporated into the curriculum of the professional accounting school; honesty, transparency and ethics are not evaluated in practice or in learning by doing to demonstrate attitudinal changes in the fulfillment of professional functions.

The answer to the question in Graphic 3 emphasizes the “yachay”, it is a Quechua word, which includes much more than mere knowledge, as it refers to the promotion of knowledge, through sustainable actions that link knowledge with doing in favor of the community. Through the value of “yachay” knowledge, intergenerational transmission from father to son is practiced.

The results are focused on two categories; the procedural one that contains "the investigative abilities characteristic of science integrated by skills, a specific declarative knowledge of the subject and a way of reasoning in accordance with it, that is to say, reasoning skills" (Guisasola et al., 2003, p. 18) and cognition that “refers to the ability to assimilate and process data, assessing and systematizing the information accessed from experience, perception or other ways” (Layza, 2015).

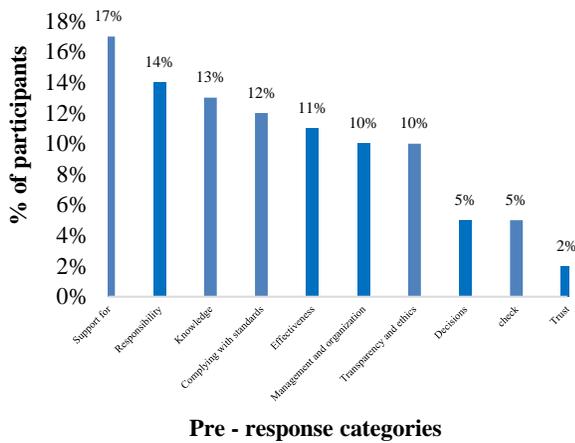
In short, the pre - response categories around the question, what do you value most about the public accountant who is in the company or entity? They were condensed, according to their intrinsic characteristics, in experiential, attitudinal, procedural and cognition, obtaining the representation shown in Graphic 4.



Graphic 4 Response categories on what you value most about the public accountant

Source: Own elaboration with data from the survey and interview

Again, the most valued in the professional performance of the accountant appears the attitudinal factor with 65%, however they result with a relevant score, also the procedural factors and experience with 20 and 14% respectively. Graphic 5 shows the results of the question, how does your performance contribute, in the work of the company, entity or organization, towards the community and its livelihoods? The answers were: Support obtained 17%, responsibility 14%, knowledge 13%, compliance with regulations 12% and with a lower percentage confidence with 2%.



Graphic 5 Pre-response categories on the contribution of the public accountant's performance

Source: Own elaboration with data from the survey and interview

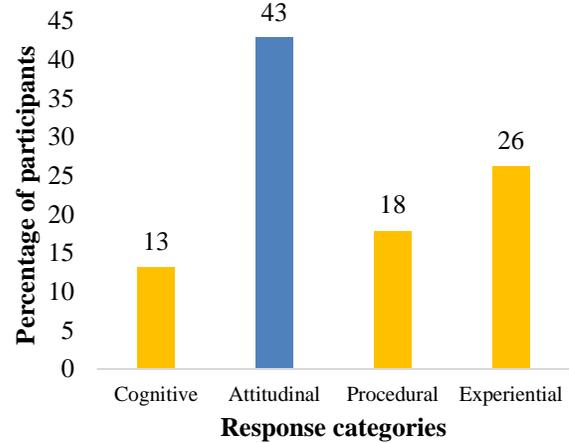
In Graphic 5, the support, responsibility and knowledge of accounting aspects and internal control of companies or organizations are highly valued by those who demand the professional service of the accountant.

The aspects valued emphasize the "llank'ay", it is a Quechua word, which means work with responsibility and knowledge, not necessarily in exchange for a monetary payment, but for support or solidarity.

The results emphasize the experiential category, defined as "the generation of a theory of action from one's own experience" (Tecnológico de Monterrey, 2010 cited in Galeano et al., 2018, p. 53). In addition, it is a method that "tries to develop people's ability to learn from their own experience, always within a specific and developed conceptual and operational framework" (International University of Valencia, 2018).

It is usual that students who show professional solvency, in addition to being specialized and having good relationship skills with change agents, express the message that the most useful thing in teaching-learning classes were the moments in which the teacher shared his experiences, with which he motivated each student to experience their own experience in the exercise of the profession.

In summary, the pre - response categories around the question, how does your performance, in the work of the company, entity or organization, contribute to the community and its livelihoods? they were condensed, according to their intrinsic characteristics, into experiential, attitudinal, procedural and cognition.



Graphic 6 Response categories on the contribution of the public accountant's performance

Source: Own elaboration with data from the survey and interview

Graphic 6 shows that the contribution of your performance, as a public accountant, in the work of the company, entity or organization, towards the community and its livelihoods continues to have a high valuation in the attitudinal factor with 43%, but in this opportunity the experience, the handling of procedures and the cognitive aspect are much more recognized, with 26, 18 and 13% respectively.

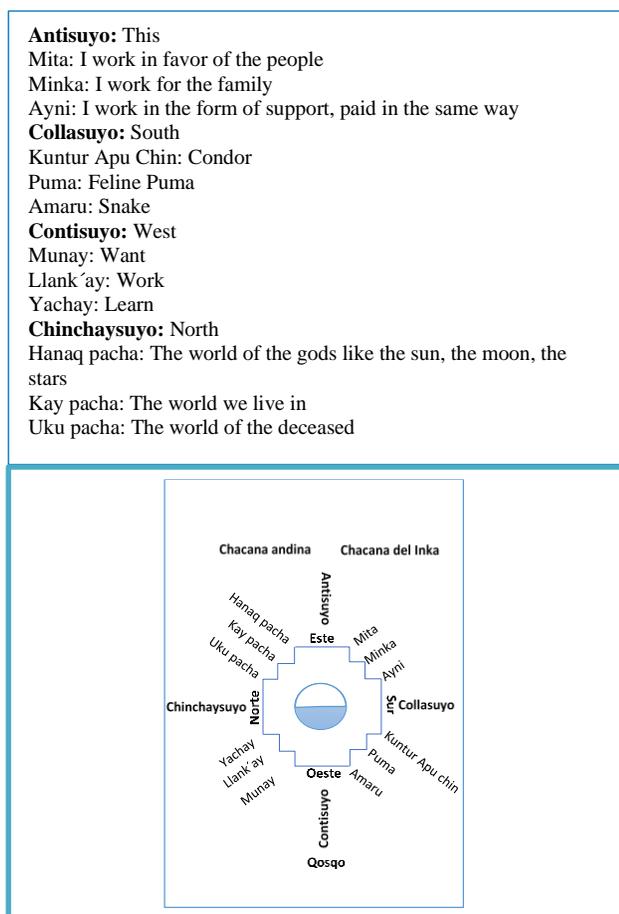
Procedurally, regulatory modernization is required to obtain and register supporting supporting documents so that no further damage is caused to the environment by the excessive use of paper, storage spaces, filing cabinets and others that may very well be replaced by means less wicked to livelihoods and the environment in general.

In the field of audits, the costs of control, supervision and monitoring demanded by the supreme auditing entity of Peru, many times far exceed the benefits that they provide to society or users, given that the budgets for their operation and maintenance are extremely high. below those that are required, and even more are not assigned for their respective control.

In other words, the allocations claimed by the control entities are simply not feasible in economies where the urgency of having goods and services barely covers the amounts to acquire the assets, without being able to allocate additional sums for control expenses for compliance with the law. No. 27785 (El Peruano; art. 32, subsection i. 2002), which establishes the authority of the Comptroller General to request the documents that support the reports of the internal audit bodies or audit companies who are obliged to keep by a period of 10 supporting documents.

It is urgent to replace these norms that decrease the value of the benefit - cost ratio, calling for actions that can be replaced by mechanisms of social accountability in strengthened contexts of decentralization and democratic participation.

In the analysis of the answers to the three questions, four categories were accumulated, which, organized by their relevance in the collective assessment, are: attitudinal, experiential, procedural and cognition; in the understanding that a transformation or change of behavior of a current situation is sought where the professional in accounting deals with the keeping of books, statements and surrenders to the Sunat, seeking that the tax collection is that provided by law; to another that links its actions with more emphasis on the contribution to social responsibility or Allin ruway, allin umachaq, in terms of accountability and transparency of the State or the company, towards society, with an intercultural perspective that recovers ancestral values of transparency and permanent dialogue with the community, in a scenario of preservation of the environment or livelihoods. See Graphic 7.



Graphic 7 Accountability intertwined in the ancestral coexistence of Cusco

Source: Appropriate from the digital magazine of Architecture - La Chakana

Conclusions

The educational model by competencies that is available at the university should serve as a basis to strengthen the attitudinal and experiential aspects in the learning process of each student, in their own environment of coexistence and their livelihoods.

Design a dialogue process where the attitudinal aspects of the accounting professional are evaluated, looking at the concrete reality in which your organization operates and identifying the results or scope as a product of their professional interaction in the work team.

The experience in the knowledge of the accounting aspects and the internal control of the companies or organizations, are highly valued by those who demand the professional service of the accountant or accountant. In general, they state that they end up familiarizing themselves first with her accounting and then with the objectives of the company or organization; while still weak, the implementation of accountability mechanisms or dialogue with the community to which the accounting professional ultimately contributes.

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The motivation to study of the student in security sciences and forensic sciences

La motivación al estudio del estudiante en ciencias de la seguridad y ciencias forenses

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Abstract

Motivation has been indicated as the engine for the success or failure of learning processes, although its origin continues to be a topic of permanent discussion. The objective of the present work was to know the level of motivation to study in the students of the Bachelor of Science in Security of the UMSNH. The applied methodology was quantitative and correlational with a non-experimental design. The instrument used was the Educational Motivation Scale (EME). The results show, the main intrinsic school motivations are: "I find satisfaction and I like to learn new things", followed by "I like to see that I surpass myself" and finally "it will allow me to choose a job in the branch that I like. ". Depending on the extrinsic motivations they are: "to lead a comfortable life later", "because education prepares me better to pursue a career later" and finally "Why do I think that more years of studies increase my professional preparation". They have a decisive role in providing confidence to the student, being empathetic and being in constant training that allows us to teach motivating classes for our students; university professors face the challenge of knowing student-centered strategies.

Resumen

La motivación ha sido señalada como el motor para el éxito o el fracaso de los procesos de aprendizaje, aunque su origen es un tema de discusión permanente. El objetivo del presente trabajo es conocer el nivel de motivación al estudio en los estudiantes de la Licenciatura en Ciencias de la Seguridad de la UMSNH. La metodología aplicada fue cuantitativa y correlacional con un diseño no experimental. El instrumento que se utilizó fue la Escala de Motivación Educativa (EME). Los resultados muestran las principales motivaciones escolares intrínsecas que son: "encuentro satisfacción y me gusta aprender cosas nuevas", seguido de "me agrada ver que me supero a mí mismo" y por último "me permitirá escoger un trabajo en la rama que me guste". En función a las motivaciones extrínsecas son: "llevar una vida cómoda más adelante", "porque la educación me prepara mejor para hacer una carrera después" y por último "Porque creo que más años de estudios aumentan mi preparación profesional". Los docentes tienen un rol determinante para brindarle confianza al alumno, ser empáticos y estar en constante capacitación que permita impartir clases motivadoras para los estudiantes; los profesores universitarios enfrentan el reto de conocer estrategias centradas en el estudiante, sustituyendo aquellas tradicionales centradas en la enseñanza y en el profesor.

Motivation, University, Intrinsic, Extrinsic

Motivación, Universitarios, Intrínseca, Extrínseca

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Introduction

School motivation reaches a special interest since the role of the teacher in the XXI century, becomes increasingly complex; It is important to recognize that we all need to be motivated to give more meaning to life. When we transfer this natural need to formal environments and contents of institutionalized education, the motivation to learn is not always shown with the expected intensity. It concerns everyone to know cases of more or less motivated students or students more motivated in moments more than others.

It has been studied that motivational processes have a precise influence on successful school performance and on the initiative to promote learning that consolidates lasting motives, establishing interests and values that lead students to reflection and autonomous development (Aebli, 1991). Motivation has been conceptualized as the engine for the success or failure of learning methods, however, its principle continues to have a permanent argument for discussion. In the special case of university students, who have chosen a career that they will practice during their existence, the argument between the supposed will to learn and the limited utility for doing so is even more surprising.

School dropout is a social educational problem, which is showing more and more incidence in higher level Institutions. For this reason, it is intended to know the level of motivation to study presented by higher-level students of the Security Sciences and Forensic Sciences career. It has been established that motivational methods assume substantial dominance in successful school performance and in the disposition to attenuate learning that strengthens lasting motives, forming benefits and values that move students to reflection and to a more significant and freer progress (Aebli, 1991).

Numerous authors have ventured into the definition of motivation towards university studies. Thus, for example, motivation, according to Valle et al. (1997) is what causes an individual to decide to pursue university studies and stay in the classroom and is given by the pursuit of certain academic and personal goals. Motivation means movement towards the achievement of goals, and according to González (2005) this movement is conditioned by attitudes, which he defines as the capacities to respond, favorably or not, to certain stimuli, in this case related to learning, academic success and acceptance by teachers and fellow students.

Educators have to reflect on their process of teaching motivation; conceive that, if your students are not motivated, it would probably be one of the sources of school failure. Such is the case that motivation clearly influences learning, which is why it is one of the main objectives of the teacher to motivate his students, since his success or frustration in university classes depends on that (Polanco, 2005). From a historical approach, Abarca (1995), shows motivation as a phenomenon developed by several elements that are manifested and absent according to the articulation determined by economic, social and cultural phenomena, therefore, it concerns relating to specific way to each of the subjects in a more personalized way. It would be about thinking no longer about the "group", but about each of the students. The present work aims to review the main manifestations of motivation in the behavior of students and their influence and tries to encourage the teacher to get strategies to manage this mechanism based on the acquisition of knowledge by the student. And, on the other hand, make a brief theoretical review of some conceptual contributions around the meaning of motivation.

It is important for the university student to be motivated, when the benefit of their learning is provided in the contour of knowledge, since the learning achieved provides them with extension in their designated profession and gives them one more step in the goal to achieve the academic end. (Polanco, 2005). A motivated student is a scholar who manifests constancy in the benefit of her career or when carrying out his university assignment. It is essential that the student is motivated to learn and a teacher who loves his subject, with excellent tools to teach it (Rinaudo, de la Barrera & Donolo, 1997). However, the situation of being motivated or not to learn significantly not only rests largely on the will of the students, but also in an indisputable part by the authority of the environment that surrounds them. It is essential to point out that the school context and the teacher have an essential role in motivation, therefore, the necessary measures must be considered to consolidate the management of the aspects that manage to specify the motivational fabric of the student's action. Motivation is considered as the level that students have to strive to achieve academic goals.

Theoretical framework

It is important that the university student is motivated, when the benefit of their learning is provided in the contour of knowledge, since the learning achieved can extend them in their designated profession and gives them one more step in the goal to achieve the academic end. (Polanco, 2005). A motivated student is one who makes explicit in his conduct constancy regarding the benefit of his career or at the time of doing university work. It is essential that the student is motivated to learn and a teacher who loves his subject, with excellent tools to teach it (Rinaudo, MC, Donolo, D. and Chiecher, A. (1997). However, the situation of being motivated or not for learning significantly, it is not only largely based on the will of the students, but also indisputable that part of the authority and the environment that surrounds them are elements that modify motivational levels or patterns. It is important to point out that both the school context and the teacher in a specific way, have an essential role in motivation. Therefore, the necessary measures must be considered to consolidate the management of the aspects that manage to specify the motivational fabric in the student's action. Motivation is considered as the level that students develop to strive to achieve academic goals. This aspect is observed through the actions that a student takes in the classroom environment.

For some teachers, motivation is appreciated as the level at which students work to achieve academic goals that they see as beneficial and meaningful. From the perspective of the teacher, it means that they have to motivate the student to do something, through promotion and awareness (Campanario, 2002). Motivating means inclining the student to actively participate in class commitments. The purpose of motivation is to move profit and direct their own energies to achieve certain goals.

Characteristics of low motivation

Low motivation generates, in the first place, a state of anxiety, which has been evaluated by Rinaudo (2003) as a mental state that paralyzes the student in achieving her goals. The cause of this concern lies in the fact that students consider themselves poorly prepared for their academic performance, and it is a manifestation that has been scarcely studied since it is found on the psychological plane, so it is not easy to quantify. Of course, assistance from university instances of psychological attention to students can be valuable aids, for example, counseling or tutoring. One of the easily recognizable traits in poorly motivated students is absenteeism.

Camargo (2010) notes the causes that originate absenteeism, and it is interesting that many of them can be attributed to the role of the teacher, and corrected with motivational actions:

The methodological preparation of the subject does not correspond to the proposed objective; activities are not aimed at achieving goals. Classes are monotonous and boring for lack of the presentation of concrete cases that conform to the theory seen, in addition there is no appropriate tone of voice of the teacher, which prevents the students from being distracted. And it often happens that the time the subject is taught is not appropriate.

There is no credibility in the teacher's abilities; he does not inspire respect or authority and his behavior is fearful, or he has no experience in managing groups. He has doubts in what he expresses, he does not use an adequate teaching methodology and does not adequately prepare the classes; the explanations to the questions posed by the students are confusing and unsatisfactory.

The teacher lacks an open and participatory method of presentation; He does not give the student the opportunity to honestly express the reasons for his disagreement and lack of interest, he does not determine states of satisfaction among the students. The student shows fear towards the teacher because of the way he directs academic practice; there is harsh criticism from the teacher towards the student, who on many occasions ridicule the latter.

The excess of confidence between the teacher and the student makes the latter attend when he deems it necessary or convenient; there are no levels of demand from educators. In addition, on many occasions the teacher constitutes a bad example due to his tardiness or absence.

Students are pressured to achieve the objectives established in some subjects, presenting an excessive drasticity in teaching practice; the student obtains negative results and rejects the subject and the teacher. The student fixes the idea that the subject he attends is not of great importance and he suffers from an excess of confidence to pass it.

Other students with low motivation do not adopt absenteeism as behavior, however, they show apathetic behavior; They remain silent in the activities, they refuse to answer questions or they try not to be designated to answer them, they do not turn in the assigned tasks on time.

This type of behavior is fully conscious and aims to avoid group rejection. So, it has been called avoidance. (Polanco; 2005).

The avoidance strategies that students develop have been analyzed by Hayamizu and Weiner (1991) and have as a common denominator the distrust of the negative judgments of teachers and classmates (Rodríguez et al; 2001). Faced with a motivational stage that forms tension, the avoidance of the unpleasant scenario is sought, and the affected person engages in explicit work and tendencies to reduce tension. In the best of cases, students are more anxious to pass than to learn (Míguez, 2005). Avoidance is grouped with a negative pattern of motivational beliefs (Urduan and Schoenfelder, 2006; Gámez et al.; 2008). The ordinary propensity of this type of students, in the long term, is the abandonment of the race, but this end is reached by the path of learning "problems", which are actually a consequence of processes, conscious or unconscious, avoidance by the student.

Types of motivation

Intrinsic motivation

Intrinsic motivation is based on internal factors such as self-determination, curiosity, challenge, and effort, which emerge spontaneously from internal tendencies and psychological needs that promote behavior without any extrinsic rewards (Reeve, 1994). Thus, intrinsic motivation will decrease if own feelings of competence and self-determination are reduced, which leads to two types of intrinsically motivated behavior: one occurs when the person is comfortable but bored and therefore motivated to find stimulation, and the other involves mastering challenges (Good and Brophy; 1996).

The cognitive approach to motivation emphasizes the intrinsic principles of motivation, such as research, profit for the job itself, a taste for learning, and a recognition of success. In other words, intrinsic motivation is that motivation associated with activities that are in themselves their own reward. Therefore, the student would prefer a career based on the aspiration to learn, for a recognition of firm success in knowledge. In addition, it is visible that it is guided by internal rewards, which are related to psychological reasons that, on occasions, are usually unknown even by the student himself.

Finally, humanistic approaches to motivation emphasize self-independence, autonomy and particular effort, the theory emphasizes intrinsic motivation. One of the most notable authors of the approach is Abraham Maslow, who has enjoyed formidable recognition in motivational psychology (Boree, 2003). He specifically proposed that human needs are hierarchical and tend to be satisfied according to the order of this. Maslow proposed a hierarchy of needs, consisting of a pyramid that contains human, psychological and physical needs. Climbing step by step through the pyramid, one reaches the top, that is, the complete self-realization of the individual. (Fadiman and Franger, 1979 p. 355-356).

Extrinsic motivation

This changes in relation to the autonomy that the subject has, categorized from less to more self-determination, which allows a distinction to be made between external, introjected, identified and integrated (León, 2010). Therefore, a person is extrinsically motivated towards an activity when there is a benefit to be obtained from it. This type of motivation is usually the most observed in university students. External situations mark the subject. If what is going to be achieved is tangible and responds to his needs, they become stronger.

Methodological considerations

The method used

A mixed methodology with a qualitative and correlational inclination was used with a non-experimental design.

The selected sample

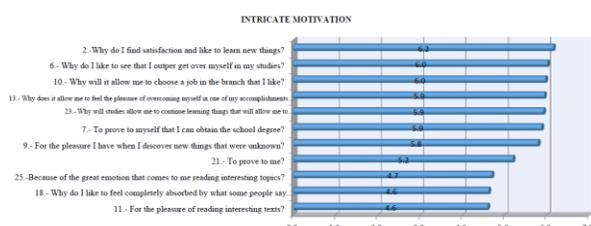
For the application of the instrument, a non-probability sampling was applied to 149 students.

The data collection instrument

The instrument used is the Educational Motivation Scale (EME) which is a quantitative technique that consists of 28 items distributed in turn into 4 items that assess the 3 types of intrinsic motivation (MI) to knowledge, achievement and stimulating experiences, 3 types of extrinsic motivation (EM): external regulation, introjected regulation, identified regulation and motivation. The systematization of the information consisted in the elaboration of frequency tables.

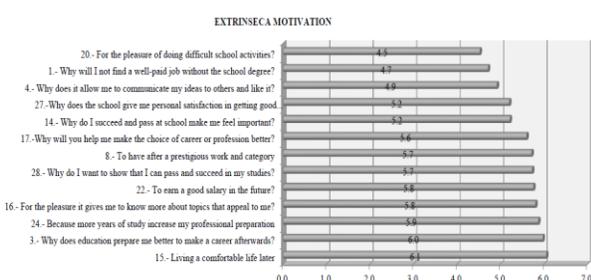
Data analysis

By analyzing the data, the intrinsic motivation of the students is observed predominantly, as can be seen in the following graph, the main intrinsic school motivations are: "I find satisfaction and I like to learn new things", followed by "I like to see that I improve myself" and finally "it will allow me to choose a job in the branch that I like".



Graphic 1

On the other hand, depending on the extrinsic motivations, according to the data obtained, we can highlight that the three main ones are; "Lead a comfortable life later", followed by "because education prepares me better for a career later" and finally "Why do I think that more years of studies increase my professional preparation"



Graphic 2

Regarding non-motivating behaviors in young people, the perspective of "before I was encouraged, but now I don't know if I should continue" stands out, followed by "honestly, I have the feeling of wasting my time here".



Graphic 3

Thus, in this study, the intrinsic motivation of the students, the main intrinsic school motivations are: "I find satisfaction and I like to learn new things", followed by "I like to see that I improve myself" and finally "it will allow me choose a job in the branch that I like". Regarding non-motivating behaviors in young people, the perspective of "before I was encouraged, but now I don't know if I should continue" stands out, followed by "honestly, I have the feeling of wasting my time here".

Teachers have a decisive role, because we must give the student confidence, be empathetic and be in constant training that allows us to teach motivating classes for our students. To achieve this, it is essential to be able to include educational resources with which today's students are familiar in the classroom. This can be, as a simple example, the incorporation of the use of social networks, applications, websites, web subjects, among other technological educational resources that, surely, are already the domain of many university students. But it is about channeling them towards educational issues.

General conclusion

Research is essential to better understand the educational phenomenon, such as the factors that influence academic performance, in this case motivation, considered as the internal state that encourages action, and that directs in certain directions and maintains interest in certain activities; it is the essential ingredient that makes us capable of learning something, in addition, motivation is responsible for us to continue learning, since many cognitive processes necessary for learning are voluntary and are under the control of the person.

It is necessary to know the reasons that drive students to improve their academic performance and, in this way, develop a methodology capable of improving their performance.

Most of the surveyed students refer to a high level of motivation and self-efficacy beliefs, they are capable and competent to solve actions that are posed, possibly, a greater assignment to tasks and cognitive responsibility (Huertas, 1997). The university teacher is challenged at this time to an atmosphere of change that demands to take a different role (Rodríguez, 2002). Not only to be a scholar in his field, an expert in methodologies, but he demands to be a guide and reviewer of the student's intellectual formation. It is essential to transform the traditional role of teachers from a role of transmitter of knowledge, to achieve the role of organizer and guide of learning, facilitator who prepares contexts, uses new methods, conducts basic research, raises databases for consultation, guardianship and appreciates the preparation of exercises (Álvarez and García, 2002; González and Wagenaar, 2003).

In university tutoring it is recognized as a dynamic connection point of the academic, specific and professional pedagogical matter of the student, focused on forming entrepreneurial students who know and manage to organize their adequate work as independent professionals.

Another interesting aspect in terms of motivation is the analysis around the learning strategies that university students have. What kinds of strategies, conscious or unconscious, do students have when they get to college? On many occasions they are not unmotivated students, but rather they are young people who have not "learned" to study. They are not builders of their own knowledge because they lack cognitive tools that really help them with their studies.

The pedagogical support is essential to form this knowledge, since it is presumed that they do not develop spontaneously (Vélez, 1999). Thus, the need to teach how to use learning strategies is proposed, since, however, students also learn, despite the fact that they are not taught, the fact of doing so manages to benefit quality learning. Thus, Burón (1996) suggests that it would be appropriate to provide a 'turn in instruction', so that it not only lies in teaching disciplinary content, but also offers to teach students to develop effective learning strategies.

The university professor is forced by a combination of tasks inherent to his function; It seems utopian to reconsider that complying with all of them requires time and effort to dedicate to rethinking about how to help in aspects such as motivation and the use of learning strategies by students. The instructional effort required by this approach is considerable, but the favorable theoretical foundations and the favorable results that are stored in research exploited in the educational field stimulate to prolong the energies in this sense (Vélez, 1999). Furthermore, we conceive that it is not a question of worrying about perfect teaching or expecting teachers to be perfect. In their context, they would have to work towards excellent teaching, one that enjoys the motivations and thoughts of others and that provides experiences and achievements that are meaningful from an emotional, professional and cognitive point of view.

The need to work with teachers and with their own way of self-regulating learning is visualized, since knowing yourself and your own learning processes can benefit you when doing it in the classroom, to provide tools and knowledge in order to to put into practice and promote active knowledge and construction of their autonomous learning in their students.

To maintain the student's interest, the student's natural energy must be harnessed to feel capable and goal-oriented. For González (2005), it is necessary for him to voluntarily do what he is expected to do and to develop his skills to achieve the desired goal. Thus, the more capable a student feels to develop an activity, the more motivated he will be to persist in it, in turn, it will give him the feeling of success or improvement and help him stay motivated. The teacher must remember that the student, as a human being, feels the need to protect his self-esteem, so it is important to seek experiences that generate feelings of pride and satisfaction. In addition, positive feedback should be offered to help you pay attention to your individual characteristics and take responsibility for your own actions.

Finally, the teacher must bear in mind that the student needs the possibility of exploring options; Receive positive feedback on your strengths and weaknesses.

Thus, the possibility of contributing to the intrinsic study elements in the analysis of school success or failure could provide an efficient process when the location of the appropriate interests, needs, motivational components, the appropriate historical moment and resources, in general, are complemented in a totally subjective process, since the individual himself is the actor of this interactive, social and physiological phenomenon, in which the adequate concordance of the motivational element can be interfered with by factors totally external to the educational reality (Huertas; 1997).

One of the challenges facing university teachers lies in adapting their teaching strategies to the new paradigm established by university education. From this perspective, the benefits of educators in relation to their educational actions will depend, to a large extent, on the familiarity they have in themselves to find all these changes that their new role carries.

The need to work with teachers and with their own way of self-regulating learning is visualized, since knowing yourself and your own learning processes can benefit you when doing it in the classroom, providing tools and knowledge to be able to carry out to practice and promote in their students an active knowledge and construction of their autonomous learning.

Talking about motivation in university students requires establishing considerations around the role of universities in relation to a world that is changing, a society that has been defined in various ways: society of fear, society of uncertainty, society of the pandemic, postmodern society, among others. Young people are living in a new era, a way that until recently had not been imagined.

The professor must optimize the information about what happens in the university, for this reason, it is essential to be linked to national and international problems, to be aware, albeit in a general way, about the normative and procedural framework that administers the university and that systematizes intellectual and contractual responsibility, for a more harmonious, effective and equitable help commitment.

Teaching autonomy is important not to be wasted in personalistic desires and divisions that abandon us from the observance of the mission and, even, from our obligations. Another of the enormous challenges facing university teachers consists of abandoning the old paradigm centered on their own person, on teaching, on the indications and strategies that they themselves considered, to move to a new paradigm focused more on the student, on their interests, in their desires and in the knowledge of the subjectivity of each of their students. It is about recovering the leading role of the teacher but focused on the processes he is in front of, the student, who wants to be heard and valued as a person (Abarca; 1995).

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A comparative study on the challenges of developing the writing skill: english language and nahuatl language

Un estudio comparativo sobre los retos al desarrollar la habilidad escrita: lengua inglesa y lengua náhuatl

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Abstract

The aim of this research work is to detect challenges that English and Nahuatl learners face when developing writing skills during first level in order to suggest strategies for implementing in future studies. The importance of comparing both languages is because Nahuatl is considered as an endangered language and English has significant pedagogy for the teaching-learning process. Therefore, it is expected that some methodologies can complement each other. The following results were obtained using a qualitative case study since it is allowed to explore and identify different factors that have the same purpose. In this case, there was a comparison between English and Nahuatl learners to determine the main challenges in both situations. Hence, 2 groups were selected for being observed and interviewed: an English class and a Nahuatl class. In addition, this research was designed for being carried out online due to the Covid-19 situation that is being lived currently.

Resumen

El propósito de este estudio es detectar los retos que enfrentan los aprendices de inglés y náhuatl al desarrollar la habilidad escrita durante el primer nivel a fin de sugerir estrategias para implementar en futuros trabajos. La importancia de comparar ambas lenguas es porque el náhuatl es considerado en peligro de extinción y el inglés tiene pedagogía esencial en el proceso de enseñanza-aprendizaje. Por lo que se espera que algunas metodologías se complementen entre sí. Los resultados siguientes se obtuvieron usando un estudio de caso cualitativo ya que permite explorar e identificar diferentes factores que tienen el mismo propósito. En este caso, hubo una comparación entre aprendices de inglés y náhuatl para determinar los principales retos en ambas situaciones. Por lo tanto, 2 grupos fueron seleccionados para ser observados y entrevistados: una clase de inglés y una clase de náhuatl. Además, este estudio se diseñó para hacerse en línea debido a la situación del Covid-19 que se vive actualmente.

English, Nahuatl, Writing, Culture, Indigenous

Inglés, Náhuatl, Escritura, Cultura, Indígena

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Introduction

Knowing a second language is required for having more opportunities at work or academic activities mainly.¹ Therefore, learning a second language in Mexico has become an essential part of the current generations of Mexican people. In Mexico, the most common second language to learn is the English language (EL). The British Council (2015) has concluded that the teaching-learning English process is noticeable in Mexican education, owing to this fact, the EL has started to be part of the basic levels of Mexican education. In addition, the EL has become important in most of the countries around the world since this language is used for administrative, cultural, religious, scientific, and sportive aspects as a trade for its convenience. On the other hand, the most spoken language in Mexico, apart from Spanish, is the Nahuatl language (NL) with over 1,500,000 speakers according to the Instituto Nacional de Estadística y Geografía (INEGI, 2010). Even though this language is not taught in the schools of the country, it has begun to become popular among language learners.

In most of the cases, people study a second language for a personal purpose. For instance, academic acquisition, social impact, economic benefit, or intercultural knowledge. Regarding academic acquisition, the fact of knowing a second language enhances learners to obtain more information. Social impact refers to communicating in two different languages without interferences, for example in social media. Knowing a second language also allows people to improve wages because tasks in other languages are recurrent. In addition, it is easier to get a job if a person knows a second language. On the contrary, some people learn a language because they enjoy learning cultures and a language is part of it. Nevertheless, learning a second language is not as easy as it seems. There are some challenges that learners deal with during the process. For instance, grammatical rules are not pleased by everyone either in their first language. Mohammed (2018) recognises cultural differences from the mother tongue into the target language as one of the main difficulties when learning a second language. Some expressions are not considered at teaching structures of the language. Some challenges also depend on the level and the age of the learner.

Some authors such as Tavakoli (2016)² express that the non-use of the target language out of the classroom is a disadvantage for succeeding in the process of learning a second language. They assume that non-English countries deal with some challenges which limit the English learning process. For instance, students are not exposed to English out of the classroom due to immersion in the first-language environment. To achieve an adequate level of both Nahuatl and English languages it is necessary to succeed in the main skills: reading, listening, writing, and speaking, at the same time grammar and vocabulary are being acquired. Learning a language also involves cultural aspects that some learners do not consider. Notwithstanding, what the reason is, it is important to have in mind the challenges that a learner could present to find the most convenient way for achieving the objective.

Literature Review

Challenges on writing in the English language

The writing skill is considered the most difficult skill to develop because of its complexity. In particular, the acquisition of grammar and vocabulary are some aspects to learn gradually. Consequently, English learners face some challenges during the process. Al-Gharabally (2015) examines the idea of assigning writings as homework instead of a class activity, considering that solitary tasks do not imply the needed process. In addition, learners from lower levels require guidance with spelling, vocabulary, grammar, and written expression. As a result, it is difficult to get feedback opportunely because most of the corrections do not explain the reason for the committed mistakes. Furthermore, classes in the classroom tend to focus on the speaking skill rather than the writing skill because the writing skill is the last skill to be produced.

Regarding vocabulary, Huy (2015) claims that the lack of vocabulary is the main reason why students do not improve their writing skills. Most of the learners are expected to learn vocabulary as they acquire the target language; nevertheless, the writing skill requires a high range of vocabulary in order to carry out the tasks anticipated. Additionally, writing skills are usually used for academic aspects; therefore, it is required to learn academic vocabulary.

¹The importance of comparing both languages it is also for detecting the treatment that indigenous people receive compared to foreign people in Mexico. Arteaga (2020) emphasize the fact that people who belong to an ethnic group are the most susceptible to be discriminated.

² Among other authors mentioned in the references.

Nevertheless, this kind of vocabulary could be more difficult to acquire. It is well known that grammar is the basis of any language. Consequently, it is not easy to learn. Moses and Mohammed (2019) conclude that grammar is one of the most challenging requisites of the EL to develop. They add the importance of grammar at the acquisition of any language since grammar involves structures of words and sentences for carrying out activities referring to the writing skill.

How to overcome these difficulties

Mohite (2015) emphasizes the importance of a teacher in the writing skill. In other words, it is essential to have guidance from a knowledgeable person on the topic. Even though the writing skill is not practiced at all in the classroom, some authors, specifically Al-Gharabally (2015), suggests the use of symbols when marking learners written work. In consequence, students can have an idea about the committed mistakes. Therefore, learners could find it easier to correct the mistakes on their own.

Another strategy to solve the challenges when developing the writing skill in the EL is to use the translation from the mother tongue to the target language. Dagiliené (2012) explores the use of translation as a tool in the writing skill since the transfer of a text from one language into another is employed. It is commonly practiced in the first levels of English learning and it is used for comparing some aspects of grammar in both languages such as syntax and morphology. Additionally, it is important to have academic knowledge in the writing skill in the first language in order to succeed in the translation of the writing skill from the first language into the EL. An advantage of this strategy is that the EL is considered to have a solid grammar referring to academic aspects.

Celik (2019) emphasizes reading skill as a significant element for improving the writing skill. He says that input is acquired at the same time students develop reading skills. This approach consists of transferring structures based on what others have written. The process is inevitable because the writing skill goes hand in hand with the reading skill since the purpose of writing is to be read. However, this proposal can be taken into account as a specific strategy for acquiring all the elements when producing the writing skill. In general, readings model language patterns that students must learn in order to produce their texts.

Difficulties when learning writing in Nahuatl

One of the purposes of the Mexican conquest of the 16th century was to impose the Spanish culture over Nahuatl culture, including the language. Therefore, Nahuatl speakers were forced to hide their culture and the language stopped its development. Due to this fact, Nahuatl is considered as a spoken language only. Furthermore, communities, where Nahuatl is spoken as a first or as their only language, are remote in places where social programs such as education are not taken into consideration at all by the government. It can be concluded that the lack of interest in indigenous communities contributes to lack of educational improvement regarding academic language (Aldaya, 2020). This may be one of the reasons why indigenous people cannot read or write. Olko and Sullivan (2015) compare two variants of the Nahuatl Language in aspects of grammar and vocabulary: The Classical Nahuatl (mind-sixteenth century) and Modern Huastecan Nahuatl. Nevertheless, the challenge that learners face is that there are around 44 variants of Nahuatl according to Pharao (2013) based on INALI, the Mexican National Institute of Indigenous Languages. Words can be written in different forms; for instance, for the word “sun” is acceptable tonal, tonali, tonalli, tonalti, tonaltli, etc.; the word “tortilla” is written as taxcal, taxkal, taxkali, taxcali, taxkalli, tlaxkali, tlaxcalli, etc. The NL does not use some letters of the Spanish alphabet; however, writers have adapted some words taken from Spanish to every respective variant; “horse” is written as cawayo, cawallo, cauayo, cahuayo, caballo. Even though the letter B does not exist in the NL, some variants accept the spelling including the letter B.

How to overcome these difficulties

Considering that there is a set of variants in the NL, it is significant to select only one of them in order to focus on that specific variant of the language. De Felice (2012) confirms the importance of making a choice when learning the NL in order to facilitate the process. According to the Instituto Nacional de Lenguas Indígenas (INALI) some of the most common varieties to study are the Nahuatl from the sierra noroeste from Puebla, Nahuatl from noroeste central, Nahuatl from Istmo, Nahuatl from the Huasteca Veracruzana, Nahuatl from the Huasteca Potosina, as well as the classical Nahuatl.

The use of the mother tongue (Spanish) is a strategy for the teaching-learning process of the NL since Nahuatl is taught from Spanish perspective. This means that translation is used as a tool for improving the writing skill in the target language. Martínez (2012)³ encourage Nahuatl learners to use technological translators which they have designed. However, it is only from Nahuatl to Spanish and vice versa. They also confirm that writings are an elemental part of the process of acquiring this language. Therefore, they have developed computer systems that allow students to understand the NL from Spanish language. Additionally, they promote the use of technology when learning this indigenous language.

Methodology

Research tradition

This is a qualitative case study in which it is enabled to explore a phenomenon through the identification of different factors that have the same purpose. Tengnäs (2016) recognizes that case studies are mainly used in qualitative research and methodology because they represent a meaningful paradigm of what is being analysed. Some of the characteristics that Tengnäs attributes to the qualitative case studies are that they explore an individual or a group and they have the aim of identifying structures, variables, and interaction among participants in the setting. Some of the benefits are that qualitative researchers focus on human experiences in specific settings because they are descriptive according to participants' opinions and feelings. Qualitative research also have the qualities of being able to be constructed or reconstructed to a greater scope.

Context

This research required to observe and interview 2 language learning groups in order to obtain relevant information for comparing the NL and EL during the writing learning process. Nevertheless, due to Covid-19 situation, this study was developed in a virtual form to avoid the crowd in a classroom. The first group was an online Nahuatl course which was taught 1 hour per week every Sunday from 11:00 am to 12:00 pm. The second group was an English course offered by the Universidad Veracruzana (UV) as a part of the elemental subjects in all the bachelors' degrees denominated as Área de Formación Básica General (AFBG).

The classes were given 2 hours per week every Tuesday and Wednesday from 7:00 pm to 8:00 pm via Zoom platform. In both groups the teachers changed traditional classes in order to continue teaching the content which it was expected to cover in their respective courses. However, online classes must not be a surprise currently. Sun and Chen (2016) claim that the development of online education has helped to stay and grow rapidly over the last decades. It does not mean that virtual classes are the replacement of face-to-face classes, but they are still a strong alternative. In addition, this study gathered information only via the internet, in this way, it was possible to carry out this research. Regarding the interviews, they were carried out via Zoom platform in an individual form. The participants were sent the link for joining the meeting in an individual form. Furthermore, computer equipment was used for performing the meetings, as well as a cell phone allowed to record the interviews. Finally, the interviews were transcribed in a sheet of Word in order to collect the information.

Findings

Grammar is complex in both languages

It was evident the challenge that students had when learning grammatical rules in the target languages. Firstly, the Nahuatl learners seemed to be confused while the teacher explained some grammatical points. However, it was observed that learners expressed their doubts at the same time they carried out the activities and the teacher provided several examples to review the involved topics. In the interview, participants claimed that agglutination in the Nahuatl language was the grammatical aspect more complex to develop. For instance, Simon said, "*El tema de que, al ser una lengua aglutinante, hay algunas palabras que deben aglutinarse y quedan muy largas*". Carlos also contributed, "*El tema de la aglutinación de las palabras es el reto que puedes tener*". This is because Spanish is not an agglutinative language and it means that Nahuatl learners are not used to create sentences utilising a lot of morphemes in only one word. De Felice (2012) defines agglutination as the kind of language that relates through affixation instead of separated words or phrases. In the case of the NL, it is characterised because the whole sentence is needed to be read in only one word in order to understand its meaning in most cases. This is the common complication that learning NL implies since agglutination is not applied in all the languages.

³ Among other authors mentioned in the references.

English learners also revealed having had difficulties when acquiring grammatical aspects of the language. In this situation, it was observed that the teacher explained some structures of the sentence using a whiteboard. Nevertheless, learners continued making the same mistakes even when they had the explanation and some examples on the screen. There were activities that required the same answers, but learners could not perform even though they had previous responses. In this regard, Perla was the participant who stated this in the interview, *“Sí se me hace difícil porque hay oraciones que en español inician a la inversa. Por ejemplo, “yo soy estudiante de arquitectura” que en inglés sería: **I am an architecture student**”*. Therefore, English learners start to compare grammar in their mother tongue with the target language to succeed in developing the EL. Some authors such as Rao (2019) explain that grammatical structures are significant for the English learning process and how it should be taught. However, it was remarkable that learners did not search for a method to achieve the purpose of the course.

Reasons why students learn NL and EL are different

Another aspect to mention is the purpose of acquiring the target language because it defines how skills are developed. Regarding Nahuatl participants, they expressed having selected the NL to study because they find it interesting to preserve Mexican culture. It means that they learn the NL for pleasure. Which was the case of Carlos: *“Porque me interesa mucho aprender nuestras raíces. La verdad es que hasta siento vergüenza del no conocer lo suficiente de nosotros. Hay gente del exterior que conoce mejor nuestra propia cultura y creo que tenemos mucho. Y creo que deberíamos de interesarnos más en lo que tenemos y parte de nuestra herencia es el náhuatl. Entre más personas podamos aprender es algo que no dejaremos que se pierda”*. This interest was also seen when they were observed during the classes. Learners were motivated to ask questions to the teacher all the time. They also shared some comments about the Nahuatl culture in order to add information to their classmates. In the same way Julia mentioned why she decided to study the NL, *“me interesa que esas lenguas se vayan preservando. Yo sé que el náhuatl es de las lenguas más habladas, sino es que la más hablada a nivel nacional después del español (en México), pero esa parte del orgullo nacional, del orgullo por tus raíces te incentiva a conocer más de tu propia cultura, de tu propia historia. También en el ánimo de que no se pierdan estas lenguas”*.

It means that Nahuatl learners consider important to preserve Mexican native languages. As a result, learners demonstrated enthusiasm and perseverance when taking the Nahuatl course. Mojica (2016) notes that most people who study Nahuatl have the purpose to preserve this language because people like this culture. Thus, maintaining the language seems to be one reason to protect its culture in general.

In the case of English learners, they alleged to have selected the English course because it is needed in their daily activities such as job and education. According to the observation sheets, English learners did not demonstrate any interest in developing the EL. This is because they did not ask questions to the teacher, they did not make comments about the topics. Indeed, they attended the classes because it was required that students were there, but they did not participate unless the teacher selected for solving tasks for the whole group. In this respect, Karla explained, *Solo porque me lo piden y tal vez porque con la acreditación que nos dan en la facultad tal vez me vaya a estudiar a otro lado, pero aun así tengo que completar mi inglés. Entonces sí es por obligación*. Another example of this was julio who confirmed, *Lo estoy estudiando porque me lo piden para acreditar las materias del área de formación básica*. As it can be seen, the EL is considered as a necessity instead of a personal interest for improving their cultural knowledge. This fact can be taken as a disadvantage in the second language process due to interest can limit learners' development. Dhanya and Alamelu (2019) claim that motivation plays a significant role in the second language learning process because when students have a particular interest, they are encouraged to engage in the procedure. Due to lack of stimulation English learners are not performing well in classes and in their own learning.

Lack of access to vocabulary in Nahuatl

Learning vocabulary is considered as one of the bases when acquiring a second language. Nevertheless, it is one of the main issues that Nahuatl and English learners face during the writing learning process in this study. Regarding Nahuatl learners, some students assume that since they are at the beginners' level, the vocabulary is scarce. Most of them find it complicated to create texts because they only have the vocabulary that the teacher has provided. Julia evaluated her performance by saying, *“al principio lo difícil es que no conoces absolutamente nada, pero conforme vas viendo solo es cuestión de aprenderte las palabras para poder escribir”*.

It was verified when the classes were observed due to learners were limited to write sentences because they did not have sufficient vocabulary. Indeed, vocabulary was mostly provided by the teacher since it was difficult for learners to obtain vocabulary on their own because this course was based on a specific dialect of the language. In the same way, Carlos answered the following regarding Nahuatl challenges, “*Aprender vocabulario e ir aprendiendo las reglas gramaticales*”. Thus, it is not easy to search some aspects of the language such as grammar and vocabulary of every specific variant. According to Alqahtani (2015), the lack of vocabulary in the target language is the reason why communication does not succeed. As a consequence, Nahuatl learners found it difficult to produce texts which required more vocabulary than the teacher explained them.

In the case of English learners, the lack of vocabulary was also the same issue when developing the writing skill. Julio was the participant who stated this position: “*Uno de los retos que enfrento es que tengo que memorizar palabras en inglés lo más que pueda*”. Similarly, Karla stated, “*hay muchas palabras que, al momento de escucharlas, suenan igual y no sé cómo escribirlas*”. It means that English learners struggle at acquiring vocabulary and sometimes they misunderstand words. It is reflected when performing activities which involve the writing skill. As observed in the English classes, the recurrent problems that learners presented were that learners did not have too many words as expected. Equally important, English learners knew vocabulary when talking but not in a written form. Therefore, they demonstrated difficulties when writing some sentences. Tovar (2017) argues that it is also significant to learn words the same way as its use in order to produce the language in a written form. Not having enough vocabulary can produce some limitations when developing the writing skill. Commonly, texts are taken into account as formal tools. Accordingly, informal writings can be the result of the inappropriate use of vocabulary. In summary, the EL and the NL present the same issue when talking about vocabulary in the same way as many other languages. At the beginning of any language course, it is complicated to acquire vocabulary because learners may not be familiarised with the new language.

The use of Spanish in both language learning processes

One of the most remarkable aspects seen in both classes was that teachers used the mother tongue instead of the target language for explaining vocabulary and grammatical elements in the English and Nahuatl languages. The English teacher who was observed explained the topics in the Spanish language to make the learners' understanding possible. Students defended the fact that the teacher explained them topics in their mother tongue because they think that if the teacher did not utilise this method, they would not comprehend anything in the target language. That is the case of Julio: “*la maestra usa español para podernos entender mejor en la clase*”.

This situation is recurrent because other participants support the same idea. Perla made the following comment: “*generalmente la maestra nos explica en español porque es inglés I, casi no sabemos y es la manera de ayudarnos*”. Therefore, English learners find it appropriate that teachers consider the mother tongue for explaining in order to achieve the main purpose of the course. Additionally, the use of the mother tongue is allowed in beginners' levels because in this stage learners are just familiarising themselves with the target language. Consequently, English learners also utilised translation as a tool when producing texts. In this case, learners wrote texts in Spanish and then they translated them into English in order to confirm what they wanted to express. Therefore, they had writings in both languages. Some authors such as Dagiliené (2012) justifies the use of translation in pedagogy since this method enables learners to identify differences in structure and vocabulary.

Regarding Nahuatl learners, Julia speculated that the teacher explained the topics in the NL because it was necessary that they understood some elements in the mother tongue. Hence, she said: “*utiliza el español para explicar los significados, para explicar la gramática. El náhuatl es mucho de prefijos, entonces utilizamos mucho esa parte. Detalles de la gramática en español para llevar la gramática el náhuatl y generalmente da ejemplos para hacer el comparativo entre el español y el náhuatl*”. Thus, in the Nahuatl group, the Spanish language is also present when explaining vocabulary and grammatical aspects. As observed in the Nahuatl class, there were some meanings that even in Spanish were hard to understand. Most of terminology was explained in Spanish in order to contextualise students about what the language implies.

Martínez *et al* (2012) add that it is necessary to explain some terms in Spanish since the linguistic Nahuatl might not cover many definitions that are elemental in the language process. Nevertheless, this method is not exclusive for teachers, but also for learners when performing writing activities. It was remarkable that Nahuatl learners almost did not resort to the Spanish language during the writing tasks. They were provided with several examples that allowed them to produce their sentences following the same sequence without using translation from Spanish into Nahuatl. This was the case of Simon: *“trato de memorizar las palabras o la estructura que tengo que seguir para armar una oración. Y con eso resuelvo los problemas. Hasta hoy y después de haber estudiado bien el material que se nos da en clase, no muchas veces he tenido que ir a consultar como se debe escribir una palabra”*. Carlos also alleged not having used the mother tongue when writing, *“Trato de no hacerlo. Si algo aprendí cuando aprendí el inglés, era que no se debía traducir, sino de pensar en la lengua y aquí trato de hacer lo mismo y creo que funciona mejor. Hace las cosas más rápidas”*.

In other words, Nahuatl learners have assimilated that it is essential that they recognise structures in the target language without comparing with the mother tongue since the beginning of their training. Hossain (2015) concludes that writing in the target language is a convenient form of reinforcing what learners study in other skills such as reading and speaking. This strategy helps learners to review vocabulary and grammatical aspects, and this manner, they become autonomous in the process.

There was more previous knowledge in English than in Nahuatl

Social circumstances and conditions influence the learning process in a second language. Consequently, there are some challenges that learners could deal with during the development according to their contexts. This can be seen in this study which compares the issues that Nahuatl and English learners face in writing skills. On the one hand, English learners revealed that most of them have studied the EL for around 6 years because this language was a subject which was taught since secondary school. Perla recognized having studied English before: *“he estudiado inglés aproximadamente siete años, desde la secundaria”*.

In the same way Karla commented, *“Antes lo básico sí me gustaba, pero ya dejé de estudiar inglés desde la secundaria. En la prepa sí me lo pusieron, pero nada más en primero y entonces ahorita se me está complicando mucho más porque ya olvidé todo desde la secundaria, hasta ahora que lo metí hasta quinto (semestre de la universidad). Por eso no me gusta tanto porque se me hace muy complejo y eso que es el primero”*. Nevertheless, even though they have had contact with the target language for at least five years, they are studying at a beginners' level and they still demonstrate common mistakes as was observed in the classes. For instance, the verb “to be” which is considered as one of the main topics to work with in the first level, is still a problem when writing sentences in the EL. Tavakoli, *et al* (2016) assume that these difficulties are present because there is no practice outside the classroom. Even though English learners have taken classes for more than five years, they have not succeeded in acquiring the language. These authors also believe that students do not pay enough attention to the EL in secondary school and preparatory school due to a lack of interest. Most of students in these levels take the EL as any other subject in the school.

On the other hand, the Nahuatl learners accepted not having had contact with the Nahuatl variant “mexicano del centro alto” (Mexican language of the centre-north) which was the variant taught in this course. However, it must be emphasised the fact that NL has around 44 variants according to Pharaoh (2013), and there are significant differences among them. In addition, the NL was an oral language which means that texts were not recurrent to produce. Hence, the participants in this study did not have previous knowledge in the language. For example, Carlos claimed that this is the first year that he has contact with this language: *“En el curso actual llevamos dos meses. Lo había intentado antes en la UNAM hace como medio año, pero tenía los horarios complicados”*. Simon contributed to this question too, *“Encontré este curso en las redes sociales, en Facebook en específico y cuadraba con lo que yo estaba buscando. Fue por eso por lo que yo me animé a inscribirme y eso ocurrió en septiembre de este año. El curso lleva 2 meses”*. Despite all these challenges, it was observed that the Nahuatl learners were able to produce sentences well-structured according to the level they are. Even though some authors such as Hamel (2017) assure that the NL is not considered for academic aspects, it is significant to mention that since learners are developing the writing skill in the NL, it is likely to have more documents for preserving the language.

Conclusion

One of the main purposes of this study was to discover how different are the challenges that NL required compared with the EL regarding the writing skill. Therefore, the following table demonstrate the differences when learning the English language and the Nahuatl language.

	Nahuatl	English	Conclusion
Grammar is complex in both languages	It is complex to acquire Nahuatl grammar due to agglutination. It is a grammatical aspect that is not common in the Spanish language.	In English there are some grammatical structures that have different order than the Spanish.	In both cases, students expect that structures are as the same way as in the mother tongue. Therefore, it becomes complicated to acquire new structures that students are not familiar with.
Reasons why students learn NL and EL are different	The interest of Nahuatl students benefits their learning process because they express enthusiasm when acquiring the language in classes.	Motivation limits English learners to perform due to a lack of interest in developing the writing skill.	In this situation, the lack of motivation is a disadvantage for English learners since they do not pay enough effort for developing their skills in the target language.
Lack of access to vocabulary in Nahuatl	The lack of access to vocabulary because it is necessary to focus on one specific variety into the language since all the varieties in this language have meaningful differences. It is also complex to obtain the vocabulary through the internet.	English students have the advantage of having easy access to information such as vocabulary. For instance, the internet, a person with knowledge or books.	Regarding English learners, they have the opportunity to obtain vocabulary on their own. However, this is a big challenge for Nahuatl learners since they find it difficult to search new words apart from the vocabulary given by the teacher.
The use of Spanish in both language learning processes	Translation from the target language into the mother tongue and vice versa was used for understanding the classes. However, it must be emphasised the fact that Spanish was not used for writing, but for speaking only.	The use of the mother tongue is also recurrent in the English learning process when students translate the words and the sentences which they write from the mother tongue into the target language.	In both groups, learners made use of the mother tongue. Nevertheless, the main issue is for English learners who use Spanish for writing because it is confusing for them when making tests.

There was more previous knowledge in English than in Nahuatl	The previous knowledge in the NL was non-existent when the course started.	It can be concluded that English students had previous experience in this language since they took English for 5 years ago at least before the course started.	Even when both groups are in beginners level, the challenge is for Nahuatl learners because they found it difficult in being in context with the language since the start of the course.
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Table 1 comparison on the challenges on developing English and Nahuatl languages
Source: Own elaboration

Pedagogical implications

Language schools may explore Mexican native languages to incorporate in their programs since the NL has demonstrated that it has the pedagogy to be taught in schools as the same way that the EL. It is also significant that foreign languages such as the EL consider different strategies for helping students to acquire the language without minimal complications. Nevertheless, the most important point to mention is that beginner’s level is when students start the second language learning process. Therefore, it is when students must be encouraged to continue developing their learning and this way, they could achieve their purposes. It is expected that this study can help people to improve in the teaching-learning processes.

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Education, entrepreneurship and the environment

La educación, emprendimiento y el medio ambiente

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Abstract

The trend of the state is to promote the creation of companies in general, which help the development of self-employment of graduates. Universities are training professionals with less dynamic production techniques in the agricultural sector, development and the needs of the population are increasing, which requires innovation in the production of healthy, profitable foods with less impact on natural resources. Professionals with business training must be developed in a manner that will allow them to generate their own jobs, look for technological alternatives that help improve the production of healthier and organic foods, and use products of natural origin that are replacing the pesticides and drugs that are reflected in the final products for the consumer. Among the development alternatives, you can venture into business projects that seek to improve the production and development of organic products, and inputs with added value made through natural processes. It can be mentioned that there is knowledge of organic agriculture, and the trainers at the University have technical knowledge based on previous and current research. However, there is little information on the certification of agricultural activities for the volumes that are required in the country.

Entrepreneur, Environmental effects, Health, Organic products

Resumen

La tendencia del estado, es fomentar la creación de empresas en general, que ayuden al desarrollo del autoempleo de los egresados. Las Universidades están formando profesionales con técnicas de producción menos dinámicas en el sector agropecuario, el desarrollo y las necesidades de la población van en incremento que exige innovación en la producción de alimentos saludables, rentables con un menor impacto en los recursos naturales. Se deben desarrollar profesionistas con una formación empresarial que permitan generar sus propios empleos, buscando alternativas tecnológicas que ayuden a mejorar la producción de alimentos más saludables y orgánicos, utilizando productos de origen natural que vayan sustituyendo los pesticidas y medicamentos que se reflejan en los productos finales para el consumidor. Entre las alternativas de desarrollo se puede incursionar proyectos de negocios donde se busque mejorar la producción y el desarrollo de productos orgánicos, e insumos con valor agregado elaborados a través de procesos naturales. Se puede mencionar que existen conocimiento de agricultura orgánica, y los formadores en la Universidad tienen conocimientos técnicos en función de investigaciones anteriores y actuales, sin embargo, se encuentra poca información de certificación de las actividades agropecuarias para los volúmenes que se requieren en el país.

Empresario, Efectos del medio ambiente, Salud, Productos orgánicos

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Introduction

The production of organic products goes beyond taking care of the diet of a population. In recent years, public health problems have been associated with food, due to the use of agrochemicals such as pesticides that are used to protect crops from pests and insects, fungi, weeds, and diseases, from which it can be generated condition such as cancer, neurotoxic and teratogens (harm to the fetus) (2016).

On the other hand, in the production of food in the livestock area, a product that contains clenbuterol hydrochloride is usually used in animal species such as cattle, sheep and pigs, for productive-reproductive purposes, this product is mainly used in animals for fattening, since it is an anabolic that promotes muscle growth and inhibits the accumulation of fat and its meat is intended for human consumption. Fajardo et. Al. (2011)

When we talk about globalization that affects agricultural production due to the importance in the trade of products on a world scale, since a traffic of goods, capital and services is generated as mentioned by De León 2018, this can generate a short-term alternative term to underdeveloped countries such as Mexico, which seeks to increase its productivity in agricultural production based on its natural resources and production techniques such as protected crops where feasible, that is, that surface that has the climatological characteristics, water, and personnel looking for a harmless or organic product. In the case of producers, the health problem has an idea of some diseases generated by using agrochemicals, however, they do not know how to address the problem of diseases caused by chemical products used in the agricultural sector. The students given their academic training, such as, Agricultural Engineers and Veterinary Doctors in training, a survey was given to 130 students, where the total population is 6000 students. The intention of this survey was to detect what was the vision and perception of the students about activity in agricultural production and its alternatives and if they considered it business, as professional training will be food production on a larger scale. The objective of this study is to promote the development of new techniques, research, and training to increase production and productivity, seeking to reduce environmental damage.

Entrepreneurship

Entrepreneurship can be associated with the “ability of a person to envision or anticipate the future of a business”., Pérez and Merino (2017). Students in the agricultural area who are interested in developing food production must consider some factors such as the type of food products to be developed, healthy products, the destination market for the sale and distribution of crops, the natural resources from which they are available, labor for both planting and harvesting, the seasonality of product prices, the costs of inputs and services, lack of information on prices in the market, and lack of the guidelines for the production of products for export. INEGI (2019).

These factors are part of a business training that will make students have more planning before starting a production process as well as see the field as a profitable business.

Environmental impact

Traditional agriculture contributes to the erosion of natural resources, mainly soils, such as erosion by water, wind and poor agricultural practices. This is why natural resource conservation programs, have had little impact on soil conservation, water and other forms of degradation. Water erosion affects a large percentage of hectares due to this type of erosion, it occurs due to rain or surface currents of streams and rivers as well as the effect of irrigation in some agricultural fields, the vegetation protects the erosive effect of water, therefore the conservation of plant resources is necessary, (Bolaños-Gonzalez et. al 2016). Oldeman (1994) points out that products were designed for international comparison purposes in the project called "land evaluation", who reports that water erosion is the main factor induced by human activities of agricultural soil practices. However, regarding the surface affected by different erosion processes, according to SEMARNAT (2003), indicates that due to the different degradation processes, chemistry occupies the first place with 34.0 million hectares that represent 17.8% of the country. Followed by water erosion with 22.72 million hectares representing 11.9%, wind 18.12 million hectares, representing 9.5% and physical degradation is 10.84 million hectares, representing 5.7%. The rest, which is 55.1%, does not show signs of apparent degradation.

Erosion, its causes and surface

Type of Erosion	Millions of Has	Percentage of Surface Erosion	Damage Caused
Chemistry	34.04	17.8	Fertility and productivity efficiency
Water	22.72	11.98	Soil loss and removal
Wind	18.12	9.5	Loss of soil and removal
Physical	10.84	5.7	Compaction

Table 1

Source: Own elaboration, with data from SEMARNAT 2014

The practice of crop rotation should be programmed according to the periods of each crop, as well as, the pH of the soil. The excessive use of chemical fertilizers damages the soil and the microorganisms existing in it. In the case of mixed and relief crops, there is little opportunity for the recovery of the soils, as well as climate change, unlike the dates of sowing and obtaining water both for the subsoil and for the irrigation of the crops.

Another environmental impact that is being presented with greater emphasis is soil erosion due to the use of intensive technologies such as greenhouses and tunnels that have a high productivity at the beginning, however, over time erosion and the use of control of variables (wind, air, sun, water, intensive use of agrochemicals) decrease the productivity of the soils considerably. Blázquez M. (2003)

Health

A part of the damage to health is generally caused by the volume and form of application of organophosphate insecticides, which are sprayed on crops but also on the environment, damaging the applicator and nearby communities, (Silveira 2018) . In various studies published in recent years, some of the health problems derived from the different forms and uses of pesticide application are described. Some of the effects of the use of pesticides can be hematological and hormonal alterations, genetic damage, behavioral alteration and brain damage. (Garcia 2018). "Experts consider that the chemicals present in all kinds of everyday consumer products are the main source of contamination." (Quintanar 2014).

In the surveys applied to the students, they show that they know organic products are healthier, however, they mention not knowing many organic products or substitutes to combat pests and diseases in the agricultural sector that affect health to a lesser extent.

Organic products

Pérez and Landeros (2009) describe organic agriculture as the prohibition of the use of pesticides, as well as, the use of organic fertilizers and the implementation of agricultural practices that can restore and maintain an ecological balance of biodiversity. In the case of organic products, there are various sources of statistical information not adequately recorded or their evolution, (Schwentenius et.al 2017). It can be said that there is confusion in the concepts of organic agriculture and certified agriculture (safety), because certified agriculture uses some agrochemicals, which despite being allowed by international organizations are still agrochemicals.

"At present, various environmental, social, economic, cultural and political factors have motivated interest in the development of organic agriculture, recognizing itself as an economically efficient, socially just and ecologically sustainable alternative with the potential to mitigate negative impacts attributed to conventional agriculture", (Arias 2015).

Given the characteristics that occur in production systems, such as, the excessive use of agrochemicals causing damage to the environment and the health of producers and consumers in general, it is considered necessary to raise awareness in the academic preparation of students, establish production technologies and less aggressive inputs in food production in general as well as the diffusion of these production systems. In Mexico, a typology of three forms of organic agriculture has been developed:

- a) Purist Its production is not usually certified and is mainly for self-consumption, it is based on local resource technologies.
- b) IFOAM, (International Federation of Ecological Agriculture Movements). This is produced by indigenous people and low-income people who produce coffee, cocoa, vanilla among other crops. It is defined by certification processes and a specific system that differentiates it from non-organic methods.
- c) Business Organic Agriculture Industry. This type of agriculture is considered of recent creation (late 90's, in highly remunerative crops, such as vegetables, fruits and agave among others. It is characterized by the substitution of conventional inputs for external natural resources. (Mexicampo, 2020).

Crops developed with traditional agricultural techniques. It is based on soil tillage, practices such as plowing, tracing are included in other agricultural practices. Generally, agricultural machinery and implements are used, sometimes certified seed is used, as well as a pre-established technological package for the type of crop to be produced.

Protected crops. They are those in which part of their production cycle is in a modified environment which surrounds the plant. There are options such as greenhouses, hydroponics, and mulches. It requires a greater investment than traditional production, however it can generate higher yields in production depending on the cultivation and management. The production of this type of agriculture is normally for the external market, which represents a greater profit when the price is stable.

Organic crops. In this type of crops there are restrictions on the use of synthetic fertilizers and pesticides to produce goods, preserving the natural characteristics of the environment in which it grows. Given its natural and healthy characteristic, the possibility of diseases decreases if no agrochemical is used, only made from natural products, which leads to a higher market value.

Methodology

Due to the increase in agricultural production, specifically production with organic and / or innocuous characteristics, a questionnaire was applied in an Agricultural University Center in the state of Jalisco with students who are training in these areas. The type of research that was applied is descriptive, taking a sample of 130 students from a total population of the center of approximately 6000 students. To analyze the information collected, a formula was used for when the total data is known, which is the following:

$$n = \frac{Z^2 PQN}{(E)^2(N) + Z^2 PQN} \quad (1)$$

Z = Value of tables Confidence 90% (1.645)

P = Positive probability (+) 60%

Q = Negative probability (-) 40%

N = Total data

E = Error 7%

$$n = \frac{(1.645)^2(.60)(.40)6000}{(.07)^2(6000) + ((1.645)^2(.60)(.40))}$$

$$n = \frac{3896.676}{30.04944}$$

$$n = 129.67 \cong 130$$

Sample size 130

Results

Of the 130 surveys, the students were asked their gender, resulting in 54% being women and 46% men. Regarding question one, it was asked if they know about the production of agricultural or innocuous products, 70% answered that they did know and the remaining 30% said they do not know. Question two mentioned if they knew any type of organic product, where 42% said that they knew of any type of product, and they mentioned compost, which is considered an input, and 58% do not know. The third question mentions if they have brought any material related to the production of organic food and 90% mentioned yes, and 10% do not know. Question four asked if the consumption of organic and innocuous products is healthier and aids in reducing diseases, and 100% agreed. The fifth question mentions if they would like to develop research on this topic and 90% mentioned they would like to do research, where 50% of that 90% are interested in the area of organic fertilizer production, 15% in herbicides and insecticides, 10% beneficial insects and 10% in agricultural practices, 15% answered that if they are interested in participating in the livestock area but do not know in which line, the rest are not interested in the research. In the sixth question, he mentions he would like to participate in a project in the development of organic and safe products and 85% of the respondents from the agricultural area stated that they would be willing to participate in a project. Questions did not show any type of research project in the livestock area. Questions arose as to why those people who said are not interested in participating, and the majority said because they do not know the subject or the market. The last question mentioned about the continuity of the traditional production of agricultural activities and 48% answered yes, while 52% want to reform and change production systems to obtain higher yields and therefore obtain better income as well as meet new markets and demand.

Conclusions

1. When conducting this research, it was detected that the students have a confusion in what corresponds to organic agricultural production vs safety. It is worth mentioning that organic products are free of pesticides or any inorganic input.
2. Women in the agricultural sector show greater interest in participating in organic food production.
3. Just over 50% of the respondents have an interest in improving production systems that allow them to obtain higher yields, produce healthier goods and obtain better income through training.
4. It would be advisable to increase the curriculum, programs on organic products and activities as well as to emphasize the difference in organic and safe products and promote the development of new production technologies.
5. A more active exchange between academics and students is recommended to strengthen the disciplines of organic production.
6. Promote training and research centers by the state that generate new studies and technologies in agricultural disciplines.
7. Promote the training of researchers in the area of organic production, requiring financial support from the state for training of human resources in this area.

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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

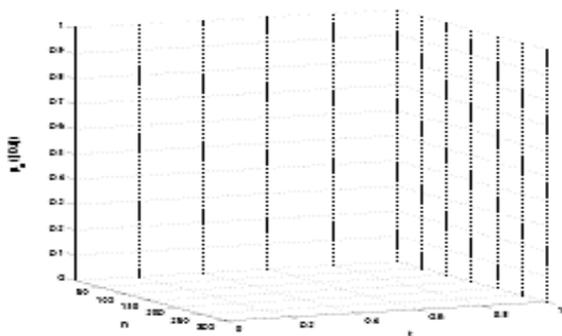
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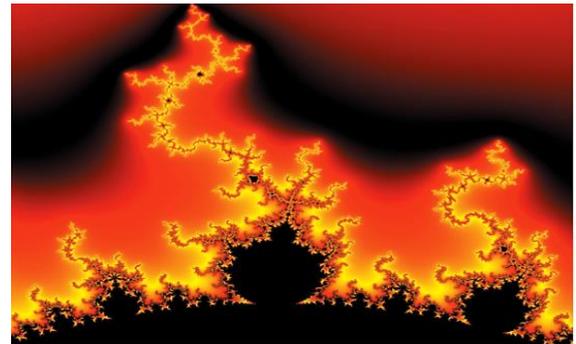


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For the use of equations, noted as follows:

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

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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.

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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.

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