Neurolinguistic Programming applied to teaching-learning processes

La Programación Neurolingüística aplicada a los procesos de enseñanza – aprendizaje

MARTÍNEZ-MARTÍNEZ, Malinali Xochiquetzal†* & FLORES-AGUILAR, Mauricio

Universidad Tecnologica del Norte de Aguascalientes, Mexico.

ID 1st Author: *Malinali Xochiquetzal, Martínez-Martínez* / **ORC ID:** 0000-0002-4111-5950

ID 1st Co-author: *Mauricio, Flores-Aguilar* / **ORC ID:** 0000-0003-0846-3803, **Researcher ID Thomson:** X-2169-2018

Abstract

The purpose of this article is to analyze the elements used in the teaching of classes at the Universidad Tecnológica del Norte de Aguascalientes (UTNA), seeking to develop a reflection in relation to the pieces that students consider necessary for effective learning and understanding of the topics of study. Living conditions, the customs, the particular characteristics of a sector of the population or geographic area, and the use of new technologies have as a consequence that the study models and the techniques or tools that young people use for the development of their education suffer continuous changes. Consequently, to believe or expect that the elements of the development of a class should be standardized, remain inert, and also, ensure the understanding and continuous interest of young people is too ambitious; This is why the main point is to obtain the vision that young people have of the elements they consider necessary for effective learning in the classroom.

Effective learning, New technologies, Neuro-Linguistic

Resumen

El presente artículo tiene como finalidad analizar los elementos utilizados dentro de la impartición de clases en la Universidad Tecnológica del Norte de Aguascalientes, buscando desarrollar una reflexión en relación a los elementos que los alumnos consideran necesarios para un aprendizaje y comprensión efectivos de las temáticas de estudio. La forma de vida, las costumbres, las características particulares de un sector de la población o área geográfica, y el uso de las nuevas tecnologías, tienen como consecuencia que los modelos de estudio, así como las técnicas o herramientas que los jóvenes utilizan para el desarrollo de su educación, sufran cambios continuos, por lo que, creer o esperar que los elementos del desarrollo de una clase deban estandarizarse, permanecer inertes, y además, asegurar la comprensión e interés continuo de los jóvenes, resulta demasiado ambicioso; es por eso que se pretende obtener la visión que tienen los jóvenes sobre los elementos que consideran necesarios para el aprendizaje efectivo (significativo) de la clase.

Aprendizaje efectivo, Nuevas tecnológias, Programación neurolinguistica

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* Correspondence to Author (E-mail: malinali.martinez@utna.edu.mx)
† Researcher contributing as first Author.

Introduction

In the professional development of education, various human factors are involved that are far from achieving an exact formula that ensures the ideal result of teaching = learning, since, although ideologically it is achieved that the teacher maintains a specific style of transmitting information and knowledge, another element of equal or greater importance influences, the disposition that the student presents towards the reception and understanding of the proposed learning.

There are multiple methodologies that propose the best strategies for the development of an effective and efficient class; public and private institutions continuously analyse these methodologies in relation to the learning results achieved among generations of students; constant changes are carried out in the structure of classes, in the ways of evaluating and grading, and, even so, the results obtained are far from ideal.

The quality and methodologies used in the exercise of education are always in constant movement and modification, with the aim of improving the exercise of teaching, with a view to improvement, however, any rule, strategy or formula will be modifiable and interchangeable, because it is not possible to speak of accuracy, when in the exercise of reference, the two factors directly involved are human capital; on the one hand, the students, with their personal aspirations and ingrained behavioural patterns, as well as their personal learning styles; on the other hand, the teacher, with his or her teaching styles, not always suitable, beliefs, needs and aspirations, in contrast to the compliance with the time and regulations of the institution in which he or she works.

That is why it is the intention of this project to investigate, from two perspectives, the student's vision, without the conditioning factor that their response may affect or benefit the image of a particular teacher, the internal model of what for them an effective class should contain from their perspective, as well as to analyse the elements that the teaching exercise should contain from the inclusion of neurolinguistic programming for the improvement and effectiveness of educational processes, with the aim of achieving a better experience for students and teachers, as well as an improvement in the quality and effectiveness of the understanding of the topics presented in class.

Explanation of the topic in general and why it is important.

What is its added value compared to other techniques?

Clearly focus on each of its characteristics

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

Explanation of the sections of the article

Background

Is it possible that the words or technicalities used by teachers when teaching influence student learning? Is neurolinguistic programming capable of modifying the positive or negative results of teaching in a competence-based system, and if so, what techniques or instruments should be implemented for a favourable result in the education of young university students? Do the communication processes used in the development of a class influence the student's perception of the class?

What elements of the class are important or fundamental for the student to consider in order to label a class as good or bad?

The purpose of this work is to analyse the elements used in the teaching of classes at the Universidad Tecnológica del Norte de Aguascalientes, seeking to develop a reflection based on the comparison between the elements that the institution requests to develop for an execution in accordance with the teaching, in relation to the types of learning developed by the students, necessary for a significant learning and understanding of the subjects of study.

Hypothesis

H_0. The average of the competences developed by the students of the Universidad Tecnológica del Norte de Aguascalientes, is equal to the percentage of kinaesthetic, auditory or visual skills, and therefore it is considered that they are samples of homogeneous groups, which shows that the student population does not depend exclusively on a certain type of learning, but that it is made up of the three different ways of assimilating knowledge, in the development of an effective class.

H_1. The average of the skills developed by the students has variations in the percentage of kinaesthetic, auditory or visual skills, so there are variations in the average, which causes differences in the specific structure of each group, which will depend specifically on the members that make it up to establish the form of knowledge assimilation of the same, in the development of an effective class.

Objective

To investigate from the student's perspective, without the conditioning factor of their response, the model of what an effective class should contain for them, as well as to analyse the elements that the teaching exercise should contain based on the inclusion of neurolinguistic programming for the improvement and effectiveness of educational processes, with the aim of achieving a better experience for students and teachers, as well as an improvement in the quality and effectiveness of the comprehension of the subjects presented in class].

Frame of reference

Neurolinguistic Programming is a communication model created by Richard Bandler and John Grinder, made up of a series of techniques whose learning and practice are focused on human development. Its main representatives have dedicated themselves to teaching how to improve communication, especially in the area of education through its correct implementation. It is called programming, as it consists of a set of operations that pursue a goal; neuro, as it studies the processes that occur in the nervous system; and linguistic because it makes use of language, expressed verbally and bodily, in order to organise behaviour and thought and thus achieve efficient communication.

Bandler and Grinder came to the conclusion that all activities carried out by human beings are characterised by following a strategy, which can be modified if it is not effective in achieving a certain goal. At the same time, they observed that humans are the only animals capable of following the same strategy throughout their lives without succeeding and yet repeating it ad nauseam, concluding that comfort and conformism, products of fear of growing up, are responsible for humans not learning to take risks.

> "NLP states that there are no failures but results of the application of a determined strategy to achieve a goal; it teaches us to set objectives, to model behaviours in order to obtain more and more competence in the areas of our performance. To do so, it studies successful (competent) people, extracts the essential ingredients of their strategies and invites us to imitate, recreate and reproduce success. Of course, this proposal has really been a revolution in multiple aspects of human behaviour, so much so that it has already penetrated into the Psychology of learning, in Psychotherapy, in Medicine, in high competition sport, in companies and organisations, and in general, in all those disciplines that require a human being with a greater capacity for intra and interpersonal communication, because NLP is the analysis and reproduction of human excellence" (Sambrano, 2003).

Its objective is that the human being learns to fulfil himself and to consider his freedom, so it helps him to understand the way in which each individual structures his experience, both in relation to himself, to others and to the environment, promoting the transformation that will allow him to conquer success, raising his self-esteem, improving their self-image through self-acceptance and generating changes that help them to increase their creative capacity, to acquire an efficient control of emotions, to fully manage their intellectual resources, their mental capacity, as well as their abilities and skills that perhaps they felt incapable of developing.

"When we speak, we make a series of choices about the way we are going to express the experience at a given moment, most of the time, this choice is made unconsciously and depends on all the conditioning, experiences, blocks, etc... that means that it obeys some rules, NLP teaches us to be aware of these rules..." (Sambrano, 2003).

The subjective experience of the world has a structure and the way we think about something in particular affects how we experience it, so NLP makes a clear distinction between the "territory" (the world itself) and the internal "map" we create of it.

"We experience the world through the five senses: sight, hearing, touch, smell and taste. Since there is continually so much information coming at us, we consciously and unconsciously eliminate what we don't want to pay attention to. We filter out the remaining information based on our past experiences, values and beliefs. What we end up with is incomplete and inaccurate, as some of the general information has been removed, and the rest has been generalised or distorted. The filtered information forms our internal map, which influences our psychology and way of being. This in turn affects our behaviour" (Bavister & Vickers, 2011).

Linguistic bases are defined in relation to a series of human choices about how to express oneself in correspondence to the experience at a given moment, most of the time this choice is generated unconsciously on the basis of previous conditioning, experiences, cultural enrichment, etc. This means that it obeys certain rules, NLP allows to be aware of these rules, helping to modify the conditioning and to work to overcome the blockages, turning them, as Bandler and Grinder say, from "toads of communication to princes of persuasion and charisma", thus changing an impoverished model into an enriched and empowered one.

Methodology

For the development of the research, firstly, a direct observation was made of the behaviour of the students in the classroom in relation to their ways of learning, in order to identify the stimuli to which they react and identify a higher degree of learning.

A random sample of 300 current students from the University was taken, leaving aside the categorisation of careers or levels with a basic question, "Mention what elements you consider a good class should have", with an open response, with the aim of identifying the degree of recurrence of the following elements:

- The components of the class and the degree of importance given to them by the student.

- The student-teacher relationship and its importance for the development of the class.

- The projection of the teacher in the management of the class.

- All of the above, linked to the communicative processes that benefit and/or harm them.

In addition, the application of a survey proposed by de la Parra, (2004), to identify their learning stimuli, consisting of questions that try to identify learning styles, as well as the routine and study habits of the student.

On this occasion, two groups from the industrial maintenance course, 2nd B and 2nd C, were chosen for its implementation, with the intention of taking a more homogeneous sample of groups with common characteristics, such as course, term, subjects and teachers.

The application of the test assumes as a primary need to identify the types of learning processes that students develop, identifying their cognitive and metacognitive skills, in order to have a clearer map of the mechanics of work to be used to facilitate teaching, understanding and retention of knowledge, as well as contrast what the student perceives as a need with an approach, where the teacher knows a little about their tastes, habits, preferences and even philosophy of life, which develops the human side giving entry to the being, and providing elements to enter into empathy with the student.

Results

The pandemic has marked a turning point in the social, emotional and mental development of society, with the sudden changes in the way of life and the way of perceiving it, it is impossible to consider that the return to the classroom can be preserved under the same parameters prior to the phenomenon, the student had to jump from one model to another without notice, even to be honest, without the preparation of many teachers for the timely monitoring of the constant changes; the post-pandemic student is volatile, capturing his attention is now much more complicated, the resources used in the classroom now fall short, because we also got used to the accessibility of information and tons of visual resources, but we missed the human contact, the practice accompanied by the theory; that is why it is necessary to develop educational tactics that allow, attract and capture the student's attention. We obtained a random sample of 300 mixed students from different levels and different careers, seeking to achieve a more homogeneous analysis of the student perspective, considering that the current enrolment of the student population ranges between 1950 and 2000 students approximately.
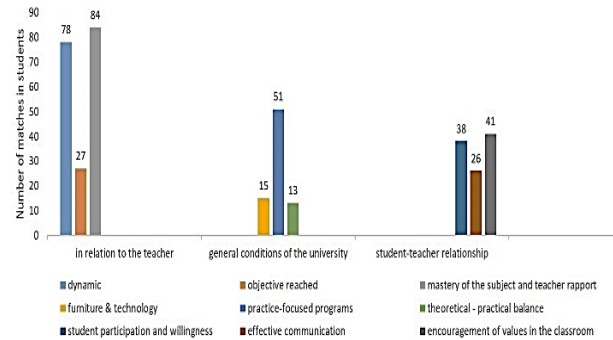

Figure 1 Elements that they consider a good class should have

Even though the question was generated through an open structure, so as not to influence and condition the answers, most of the students agreed, which by their nature are structured in three blocks, which are explained below.

The first block groups together all the responses related to the student's analysis of the teacher, in terms of the preparation of the class through activities that provide dynamism and the use of didactic material for the development of the class, in order to make the class attractive and interesting, in which 78 students agree.

Within the same block, the students analyse the teacher's ability to develop and adequately explain the subject, where in addition to their professional preparation, they ask that the teacher has the ability to use different teaching methods, where the different ways of learning can be covered, that the teacher shows availability and openness to resolve the student's doubts, and they even analyse the confidence that the teacher shows in front of the group and in the handling of the subjects. It is worth noting that, in the comments generated by 84 students, they talk more about the qualities of the teacher as a person than as a professional.

In the second block, the responses related to external elements are grouped together, related to the structure and material qualities of the university, which influence the effective development of the class, mainly on the practical question, they analyse the time allocated to the development of the subjects in relation to their content, as well as the structure of the programmes based on their theoretical-practical distribution.

A total of 15 students consider it fundamental for the effective development of the class, to have technological devices that allow the development of the same through audiovisual material, as well as inputs for the development of practices. 43 students believe that it is more important for their academic preparation to develop practice over theory, and only 13 of those surveyed consider that both are equally fundamental and that a balance is necessary.

In the third block, all the answers that talk about the importance of the relationship between students - teacher for the development of the ideal class are grouped together. In the first instance, there is evidence of the recognition of 38 students who are aware that the willingness and active participation of the students is fundamental for the effective development of the class, where the respondents talk about how essential the attention and interest of the student is.

The development of effective communication processes between student-teacher and student-student is also considered fundamental, and they even consider the trust that the teacher generates and the development of a class in a friendly and relaxed atmosphere to be important.

Finally, mention is made of values that the students consider important for the harmonious and effective development of the class, such as order, silence and respect. 41 students consider these values important for the generation of a calm and friendly atmosphere in the classroom. These responses show the importance of the human factor and the human relationship in the teaching process.

In relation to the implementation of the neurolinguistic programming questionnaire, two groups were selected from the industrial maintenance course in order to identify the differences between the groups on the type of learning they manage to identify if there is homogeneity in the variables, obtaining as a result, that there is no variation, since there is no difference between their means and the standard deviation is minimal.
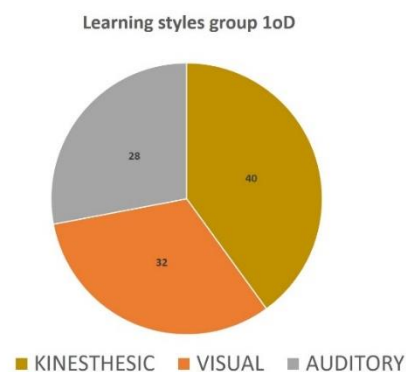

Graphic 1 Learning styles group 1° D
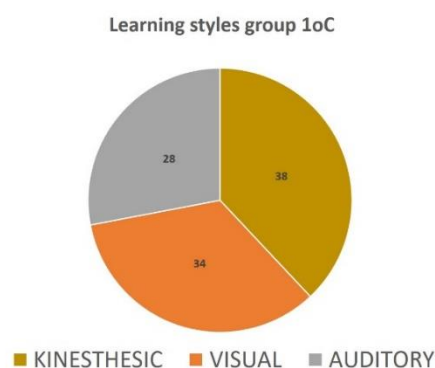
Graphic 2 Learning styles group 1°C

Below is the breakdown of the averages by learning system according to the student's perception:
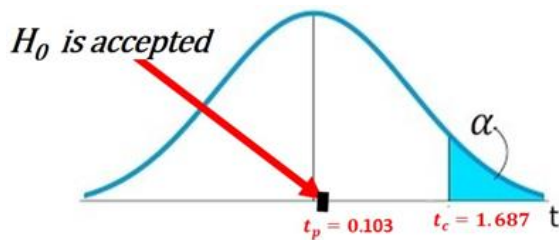
Auditory

The graphic shows that the difference between the means is 0.005 which falls in the area of acceptance of null hypothesis with 95% confidence and 5% error that there is no difference between the means and that the groups present homogeneously the 28% that are perceived through auditory learning.
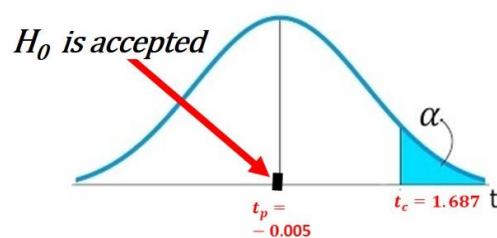
Graphic 3 Acceptance of null hypothesis auditory learning

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Visual

The graphic shows that the difference between the means is 0.103 and that it falls in the area of acceptance of the null hypothesis with 95% reliability and 5% error that there is no difference between the means and that the groups present homogeneously between 32 and 34% of the cases are perceived through visual learning.

Graphic 4 Acceptance of null hypothesis visual learning

Kinesthesic

The graphic shows that the difference between the means is 0.071, which falls in the area of acceptance of the null hypothesis with a 95% reliability and a 5% error that there is no difference between the means and that the groups present homogeneously between 38 and 40% of the cases are perceived through kinaesthetic learning.
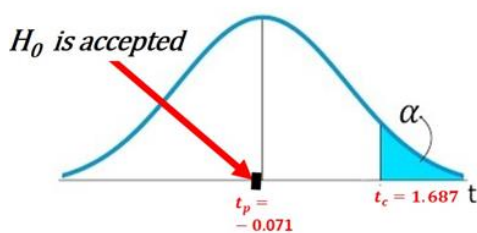
Graphic 5 acceptance of null hypothesis kinaesthetic learning

It is possible to conclude that the three learning styles are presented homogeneously among the groups, which shows that the three are similar, regardless of the fact that the groups analysed are different, their perception of the learning styles is the same, making it clear that the null hypothesis is correct. The confrontation of the two points of analysis is considered important, on the one hand, their perception of the reality and needs of an effective class, compared to the real way of learning; as this opens a panorama for the generation of teaching tactics within the study process towards neuro-linguistic programming, and the path towards meaningful learning.

Conclusions

In relation to the student's perception of the elements that he/she considers an effective class should have, a greater tendency is found in three important aspects: firstly, the teacher's disposition and mastery in teaching the class. Secondly, students are interested in a dynamic class that attracts their attention and captures their interest. Thirdly, they asked for lessons to be practice-oriented.

In reference to learning styles, the sample indicates that the groups are homogeneous, regardless of the number of students per group, and they perceive themselves as more agile in the kinaesthetic ability, continuing with the visual ability and finally the auditory ability.

The verification of both variables serves as a reference and introduction to further research in the analysis of the inclusion of neuroeducation as a meaningful learning tool for students at the Universidad Tecnológica del Norte de Aguascalientes.

This information serves as a foundation to investigate how to generate a more conducive environment for the development of more dynamic and attractive classes, focused on practice, creating strategies that are more kinesthetic than visual and more visual than auditory, to take advantage of the perception of students for meaningful learning, continuing with the research exercise in the introduction of the same in different subjects, to identify whether there are changes in both the way the teacher works and its acceptance in the group, as well as in improving academic performance.

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