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La *Revista Cátedra*, which belongs to the Faculty of Philosophy, Letters and Education Sciences of Universidad Central del Ecuador has been a means of communication since 1992; the academic voice of the professors was expressed through the bulletins, whose relevant objective was to improve the educational quality based on their experience, wisdom and knowledge as professors forming other educators. On May 2018, Revista Cátedra reemerges as a space that creates and disseminates articles oriented to the improvement of the educational process and its linkage with society.

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To disseminate multidisciplinary scientific unpublished articles, elaborated under the parameters of the research methodology, written with academic rigor and based on the teaching practice.

#### TOPICS

The topics covered are the theoretical bases of the Education Sciences in its different specialties and levels of the educational system.

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The Revista Cétedra is directed to all the national and international researchers interested in publishing quality works that contribute to the improvement of the educational process.

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The Revista Cétdra, of Universidad Central del Ecuador, Faculty of Philosophy, Letters and Education Sciences, disseminates scientific articles on diverse areas related to the Education Sciences, supported in the methodology of educational research and community service.

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#### EDITORIAL

The Cátedra Magazine is pleased to present volume three, number one in the electronic version. The theme developed has its theoretical bases in the Educational Sciences in its different specialties and educational levels; this is how some relevant aspects are presented, such as: gender, computer science and education.

The contents presented in this new issue are characterized by the fact that they are elaborated under the parameters of the research methodology. In addition, they are built with academic rigor and based on teaching practice.

The issue consists of seven approved articles:

The first article, entitled *The Conflict of Feminist Ideology in the Fang Culture: an approach to the study of patriarchy in Equatorial Guinea*, by Pedro Bayeme Bituga-Nchama. The manuscript presents an analysis of the conflict between feminist ideology and the Fang culture, one of the various ethnic groups in Equatorial Guinea, Africa. This study is important because it highlights the multiple difficulties that feminist ideology encounters in influencing these people. The main results of this study show perspectives and challenges for an education oriented towards equality between men and women.

The second article entitled *Use of SCRATCH in the learning of Programming in Higher Education*, by Hamilton Pérez-Narvaéz, Rosabel Roig-Vila and Lilian Jaramillo-Naranjo. The manuscript presents an analysis of the advantages of using the programming language Scratch for the development of skills such as: modeling, abstraction and pattern recognition. In addition, Scratch encourages cooperative work, tenacity and perseverance in the teaching-learning process.

The third article entitled *Analysis of bilingual intercultural education in the educational institutions of the Tsáchila nationality, Ecuador*, by Victor Sánchez-Raza and Magdalena Rhea-Almeida. The manuscript presents an evaluation of Bilingual Intercultural Education (EIB) in Ecuador and how it has become a focus of discussion in Ecuadorian education due to the coexistence of peoples and nationalities that coexist in the same territory. Its main contribution is the identification of inclusive elements for the cross-cultural curricular axis that should be strengthened in the Unified General Baccalaureate (BGU) in order to contribute to the recovery of the Tsáchila cultural identity, under a socio-educational, qualitative, descriptive and explanatory approach to the teaching-learning process.

The fourth article entitled *Playful Strategies in Learning the Inorganic Chemical Nomenclature,* by Verónica Maila-Álvarez, Helen Figueroa-Cepeda, Elizabeth Pérez-Alarcón, Jefferson Cedeño-López. The manuscript evaluates the incidence of ludic strategies in the teaching-learning process of inorganic nomenclature. Its main contribution is the analysis of active methodologies that promote a change of attitude and allow the contents to be approached in a participatory manner.

The fifth article entitled *Perceptions of inclusive education in Ecuador*, by Francisco Rojas-Avilés, Lida Sandoval-Guerrero and Oswaldo Borja-Ramos. The manuscript presents an analysis of the policy of educational inclusion in Ecuador and its relationship with current pedagogical action in educational settings. The article contributes mainly to innovation in



pedagogical thought and briefly presents some perspectives and challenges to promote inclusive thinking, but, above all, open to diversity.

The sixth article, entitled *Analysis of women's dialectics in the 21st century in Ecuador through the speech of Cynthia Viteri*, by Miguel Román-Jaramillo and Magali Arévalo-Arteta. The manuscript presents in a general way, through practical examples, a discursive analysis. Dr. Cynthia Viteri was considered as the subject of analysis, since she is currently one of the most prominent women in Ecuadorian politics and the highest authority in the city of Guayaquil, Ecuador. The main areas that have promoted research are linguistic diversity, the difference in linguistic acquisition according to gender, forms of cultural transmission and, especially, the acquisition and development of communicative competence.

The seventh article entitled *Approach to the situational state of the teaching rights in the decade of correist government, Ecuador,* by Oswaldo Haro-Jácome and Ana Chamorro-Morales. The manuscript analyzes the situation of the rights of Ecuadorian teachers in the labor and trade union spheres during the decade of the Correa government. It is an investigation that gathers the opinions of teachers belonging to the sector of public servants run by the State. Among the most relevant results is the fact that most teachers feel that their rights have been violated, especially their labor, union, and civil liberties rights.

**Revista Cátedra** thanks all the authors and evaluators of the articles that have made possible the publication of this issue. It extends the invitation to the national and international academic community to present its research papers related to the Sciences of Education in its different specialties and educational levels.

Directors/Editors-in-Chief





# La conflictividad de la ideología feminista en la cultura fang: una aproximación al estudio del patriarcado en Guinea Ecuatorial

The conflict of feminist ideology in the Fang culture: an approach to the study of patriarchy in Equatorial Guinea

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## Resumen

El presente artículo tiene el propósito de evidenciar la conflictividad que hay entre la ideología feminista y la cultura Fang de Guinea Ecuatorial. Este estudio es importante porque pone de manifiesto la razón por la que se dificulta el arraigo del feminismo como ideología dentro de la cultura mencionada ut supra. El feminismo es una ideología universal que tiene el propósito de acabar con el patriarcado. Teniendo presente esta realidad, en la cultura Fang existe una aversión al feminismo porque se concibe como una amenaza al orden establecido por el sistema patriarcal que ha oprimido durante largos años a la mujer Fang. Hay que admitir que hoy en día las cosas empiezan a cambiar porque existe una toma de conciencia de parte de las mujeres que cuestiona todo lo que se ha dicho que era normal para la mujer. La solución que se propone para evitar la sumisión de la mujer Fang, es que esta se debe educar en igualdad de términos. Los principales resultados de este estudio muestran que es necesario el feminismo para que la mujer Fang pueda darse cuenta que también es persona y merece ser tratada como tal, sin discriminación ni estigmatizaciones sociales. En relación a las consecuencias de esta solución hay que señalar que, si se educa tanto al hombre como a la mujer en igualdad, se construiría una sociedad más equitativa que no rechace la ideología feminista por considerarla perjudicial para la mujer Fang.



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# Palabras clave

Cultura, feminismo, ideología, patriarcado, subordinación.

## Abstract

The aim of this article is to demonstrate the conflict between the feminist ideology and the culture of one of the various ethnic groups of Equatorial Guinea. This study is important because it highlights the many difficulties that feminist ideology has in that country. With this reality in mind, there is an aversion to feminism because it is conceived as a threat to the order established by the patriarchal system that has oppressed women for many years. Today things are starting to change because there is an awareness by women who question everything that has been said and that was normal to them. The solution proposed is that in order to avoid the submission of the Fang woman, she has to be educated in equality. The main results of this study show that feminism is necessary for the Fang woman to realize that she is also a person and deserves to be treated as such, without discrimination or stigmatization. In relation to the consequences of this solution, it should be noted that if both men and women are educated in equality, a more equitable society that does not reject feminist ideology would be built because it is considered harmful to Fang women.

# Keywords

Culture, feminism, ideology, patriarchy, subordination

# 1. Introduction

This article aims to explain why there is a rejection of feminist ideology in the abovementioned ethnicity. This rejection causes the word feminism to become a problem, because it would prevent women from mobilizing to end the patriarchal system, where women have to carry a cultural weight that many sometimes cannot even stand. While there is no national literature addressing this issue, it should be noted that this study is developed through the observation of the Fang woman in her cultural context. In the absence of rigorous studies on feminism in Equatorial Guinea, research has had to be investigated on the basis of direct observation. In this sense, it must be mentioned that the Fang woman is a victim of the patriarchy that exercises on her a series of cultural duties or traditions such as imposed polygamy, levirate, as well as other series of rites that only legitimize the oppression and undervaluation of woman.

The problem observed is that men are trying to reorganize to stop or combat the feminist ideology that women are embracing and avoid ingesting their status as selfless and submissive to men. In Fang-Bantú culture, the role of women has been created under a system of male domination known as patriarchy. Discrimination against women has a patriarchal basis, which serves to systematically oppress women. That statement is based on the fact that in this culture man is put as a measure of all things, that means that men have the power to rule over women and become their owner. It is therefore clear that this is a macho culture where women are discriminated against because of their sex and therefore it is a *status quo* in which they are undervalued.

Fang patriarchy represents the opposite of feminism, because feminism advocates emancipation and equality, and patriarchy advocates for the systematic dominance and oppression of women. Therefore, men show an aversion to feminism for fear that women will emancipate and want to question the cultural precepts that vilify them. Thus, it is noted that this is a fight in which patriarchy is losing. In addition, it can also be observed that yesterday's woman is not the same woman of today. Women have understood that they can



be free and equal to men, at least in terms of equal opportunities and are equal to decide for themselves. In this research, the word conflict has been chosen because it is noted that there is currently a struggle in the culture between feminism and patriarchy. No Fang man who assumes the ancestral cultural structure can admit that a woman is a feminist, since that would mean transferring power to women. On the basis of the above, the following questions arise: What gives patriarchy legitimacy to oppress Fang woman? Is feminism a trench for women or is it simply their chance to demand their autonomy? Why does the Fang man oppose feminism? Is feminism incompatible with the Fang culture?

This hypothesis has been raised: if the Fang woman received a feminist education, she would not endure all the abuses to which she is subjected by the patriarchy. To defend this position, some scientific literature will be used to respond to those who try to deny the subordination of women to men in the Fang culture, and then show that the Fang patriarchy is afraid of ideology feminist, reason for which patriarchy uses several objects to repel its impact on the Fang cultural context.

## 2. State-of-the-art

It must be said that talking about the Fang requires a brief description of this cultural group that is scattered in several Central African countries such as Cameroon, Gabon, Congo, São Tomé and Príncipe. They come from the large linguistic family known as *Bantú*. In fact, the Fang language has a linguistic similarity to that of other people in Central Africa.

To better understand what the Fangs are, it must be considered:

The Fangs are the largest ethnic group in the Republic of Equatorial Guinea. Originally from the interior of the continental region, known as Río Muni, it is currently possible to find them in all the provinces of the country and it is estimated that they make up ninety percent of the population of the country. Beyond the Equatorial Guinean borders, they are distributed throughout neighboring countries, constituting one of the largest ethnic groups in Central Africa (Ovono, 2018, pp. 33-48).

As can be seen in the previous quotation, it is an ethnic group that has consolidated in Central Africa. For several years, this people has been shaping their own worldview. In fact, it is a culture that has been transmitted from one generation to another, preserving the cultural legacy inherited from its ancestors. These people have a diffuse origin because there are no testimonies that actually describe exactly their origin. The common hypothesis is often that the Fangs come from North Africa, where they had migrated looking for better settlements for cultivation and hunting.

Talking a little more about the Fangs, Professor Bolekia states that:

The Fangs are an ethnic group with a very characteristic cultural and linguistic identity [...] They continue to retain their tribal structure with patriarchs above those who have no other authority [...] It must be said that they are governed by the clan system, whose base group is the horizontal family, and whose members are grouped around a patriarch, descendants, other blood relatives, and others (Boleká, 2003, p. 25).

Resuming Bolekia's reflection, the Fangs form an ethnic group with their own idiosyncrasies. This means that they have their own myths, philosophy, anthropology, which constitutes the cultural heritage that characterizes them. Now, bearing in mind that feminism is a universal movement, it is more correct, at least in this context, to talk of



feminist ideology because as it has been said, "there is not a single feminism, but a multitude of feminism" (Elósegui, 2011, p. 18). If there are several feminisms, then it is right to talk about African feminist thinking by being the one that studies African women in their own context. In fact, in this research the universal feminist ideology in the African context of Equatorial Guinean women is addressed, which highlights the difficulties women go through in their culture and that condition them to behave in a certain way. In other words, African feminism is the one that "emphasizes the discrimination faced by African women by virtue not only of sex/gender, but also, and above all, of slavery, colonialism and racism" (Landaluze & Espel, 2015, p. 43) In other words, African feminism studies and lives the realities of African women, who are often alien to women from other cultural backgrounds due to the things they live such as ablation, forced marriage, levirate and polygamy.

All these realities experienced by African women are the clear testimony of the existence of patriarchy, a system of long-lived domination and perfectly established by the great patriarchs. Being a little more precise, patriarchy refers to "a system of social organization in which the key positions of power (political, economic, religious and military) are, exclusively or mostly, in the hands of men" (Morán, 2018, p. 39).

In international literature, the question of patriarchy and feminism is well studied. In other words, they are subjects that have lot of literature. Hence, the aim of this research is not to reconstruct the theoretical framework of feminism, because it is considered that there is already a lot of information. However, in terms of African feminism, the area in which this research is limited, it must be said that there is not enough research conducted to study sex/gender relations in the African continent.

The first feminist claims go back to the French Revolution, with protagonists such as Olimpia de Gauges, Mary Wollstonecraft, among others who fought alongside men to get the same rights. After these first demands, the suffragettes were reached, who demanded that women have the right to vote, a conquest that was not easy at all, although the purpose was finally achieved. For the first time, women could express their will in matters affecting all citizens through their participation in universal suffrage. For all this, it is clear that the feminist struggle is full of many pitfalls because it has not been easy to achieve the total emancipation of women. Feminism, as a political theory, must deepen and continue to advance the emancipation of women. One of the great events of feminism came with the publication of the Work of Simone de Beauvoir, The Second Sex, a before and after of feminist ideology is marked. In this work, the author mentions that " there is not a situation of reciprocity between women and men, but a relationship of domination on the part of the man who uses the woman as dependent subject on the economic, ontological and moral interests" (Beauvoir, 2011, pp. 16-17). After the publication of this work, Betty Friedan's the mystique of femininity would later appear, to contribute as well as her predecessors to catapulting feminist thought. Friedan's concerns about the woman's situation were highlighted in her above-mentioned book. Friedan points out aspects such as that:

The woman was taught to sympathize with those neurotic, wretched and feminine women who pretended to be poets, doctors or politicians. She learned that truly female women do not aspire to pursue a career, to receive a higher education, to obtain the political rights, independence and opportunities that the former suffragettes had fought. [...] Thousands of authoritative voices applauded her femininity, her composure, her new maturity. All they had to do was devote themselves from their earliest age to finding a husband and to having and raising children (Friedan,1965, pp. 29-30).



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Revista Cátedra, *3*(1), pp. 15-26, January-April 2020. e-ISSN:2631-2875 DOI: <u>https://doi.org/10.29166/10.29166/catedra.v3i1.1923</u> Clearly, both Friedan (1965) and Beauvoir (1949) are a reference in feminist studies. The two focused on demonstrating that many things that were considered natural, such as women's submission to men, were nothing more than the product of a social construct established by men. In this sense, as Suárez points out, "feminism makes a lot of sense when defined as a movement conducive to improving the political, social, educative and economic condition of women" (Suárez, 2008, p. 10).

Therefore, feminism does not mean an ideology that goes against man, although it has sometimes been interpreted this way, which is not strange because feminism questions the established order in which women are submissive to man, an order that undoubtedly leads the way to boys. Women do not struggle to measure their pulses with men, it is simply a series of claims that cry out for justice and equality, because they have realized that the oppression of women has no basis, nor can it even continue to maintain the argument of the biological difference of the sexes to explain why there are inequalities between men and women. Today, the Catholic Church also does not support the distinction between the sexes there that contends that "according to the image of the creator there is neither male nor female" (Theological Sum I, q.92, a.1, c.). Obviously, this means that it is not natural for a woman to be oppressed or for the woman to be inferior to the man. It is true that in this work it is referred about the Fang woman, but it is admitted that in the face of feminist claims, there are no differences in women because they all want to emancipate, get ahead or be able to have their own income without relying on man. In other words, the common of all feminist claims is that they want to demolish the patriarchal system that has caused so much damage. Despite this evidence, it is also possible to re-mention that the cultural context of each woman must be taken into account in this struggle.

To understand the conflict of feminist ideology in the Fang culture, it must be taken into account that feminist theory is based on "three basic categories such as difference, inequality, and oppression" (Ritzer, 1993, p. 365). However, the foundation of patriarchy in Equatorial Guinea and its rejection of feminism can be understood through the following theories.

a) **The theory of the biological difference of genders.** The traditional approach to explain the inequality between men and women is on the argument that biologically the body of men and women has different characteristics. Therefore, they must also be treated differently. Some authors such as Alice Rossi (1997), Freud, among others are in this line of thought.

Inequality and oppression are, in this sense, the result of the biological difference between men and women. The difference is established from the physiognomy of man and woman, i.e., the anatomical characteristics of women make it deserving of different treatment to man. In addition to this, it is necessary to take into account that, in many people around the world, including the Fang people of Equatorial Guinea, set out from this difference to establish different patterns of behavior for men and women. In short, the unequal or different treatment that women receive is usually justified on the fact that nature made man and woman different. Therefore, they should also be treated differently.

b) Theories of Gender Oppression. Why do the Fang men oppose feminism? This is the question proposed to answer in this investigation. First, it must be understood that feminism is the complete opposite of patriarchy. The Fang men are interested in oppressing and subduing women because in that way they can do everything they want with women. In this regard, it should be noted that:



For theorists and theorists of gender oppression, women find themselves in a situation where men use them, control, subdued, and oppress them. This pattern of oppression is deeply and powerfully incorporated into the organization of society, a basic structure of domination commonly called patriarchy (Ritzer, 1993, p. 379).

If there is this conflict between feminism and patriarchy, it is because men are unwilling for women to assume power as well. Understood by power the fact that women can also perform tasks that have traditionally been of men. The fight against oppression requires that women disassociate the name from the patriarchal system because it is totally incompatible with feminist ideology. Oppression has been exerted on women in all parts of the world, because women were seen as a less being than had to be educated according to certain standards of each society. More precisely, patriarchy must be destroyed in all its forms by representing a system of male domination. Therefore, the only way to combat patriarchy is to empower women to fight for their rights. The woman has been immolated in the Fang tradition, relegating her to the background, and making her believe that her sole purpose was to have babies and satisfy her husband's desires.

Equatorial Guinea's current revolution is mostly feminist because women's access to the world of work is unprecedented in the history of Equatorial Guinea. The Fang woman has come out of the private to the public. This achievement has been personally measured by the spread of feminist ideology, which represents a major advance on gender issues in Equatorial Guinea.

Current feminist movements point out that a particular gender (the female) has been systematically oppressed. For this reason, the current feminist struggle is entrusted with ending all the privileges that men have had to the detriment of women. In societies men have presented as protectors of women because they are apparently weak and need a man to protect them, while in return, they are dedicated to household tasks and childcare. With that way of organizing things, women ended up being devoid of their own autonomy, but it is time for social stereotypes to be destroyed to make the difference between men and women. As the world stands today, women need to take the leadership of the world, because men have failed in leading humanity to a better path, a fact that is evident in issues such as the two wars, the destruction of the ecosystem, among other things. For this reason, women need to take the leadership of the world. In the fight for equal opportunities between men and women, it is not just the woman who is fighting to make this possible. There are also men who have become aware of the social injustices or inequalities that patriarchy has imposed on the basis of sex/gender. For this reason, today's feminism is understood as:

All those individuals and groups, reflections and actions aimed at ending the subordination, inequality and oppression of women to achieve their emancipation and the construction of a society in which discrimination for gender does not have any room (Castells,1996, 10).

From the above definition, the theoretical basis of feminism becomes stronger because its goal is ultimately to end the total subordination of women to men, although it must be stated that the subordination of women has been the most universal form of the world. In fact, the pattern seen in all cultures of the world is in the secondary role that women play. Therefore, when feminism appears, it ends up stumbling with detractors, because they have considered it as a theory that encourages conflict between the masculine and the feminine, i.e., it has to deal with vilify. Bearing in mind the configuration of societies through patriarchy, "today's feminists would have as their main claim equal rights for women and



as a specific objective the achievement of a neutral world from the point of view of the gender" (Ergas, 2003, p. 603). In the light of this research, it must be clear that we are not against Fang culture because it is part of their idiosyncrasy; however, the problem is the reification to which women have been reduced and attempts to continue to do so, rejecting any ideology like the feminist that helps them to emancipate. The reasons why there is a rejection of feminist ideology, as a manifestation of patriarchy, are then set out. In this culture, there are reasons not to want feminism in Equatorial Guinea, at least as a movement that opposes the current patriarchal system. For example, polygamy, which is one of the ways patriarchy is manifested in Equatorial Guinea, is based in several ways, i.e. the manimposed Fang patriarchy attempts to justify its practice through various arguments.

In this regard, Nsang Ovono notes that "the reasons alleged to support the polygamous family structure are very different. Among the reasons that lead Fang men to practice polygamy are economic, social, sexual and reproductive" (Ovono, 2018, pgs. 44-45).

Indeed, in order to have a new society that does not abandon its culture but criticizes itself from those things that dehumanize the human being, it is necessary that the consolidation of feminist ideology should take place. To live in a society that does not discriminate against people because of their sex, it is necessary to promote feminist ideology in Equatorial Guinea, and indeed, feminism acted as "the lantern that shows shadows of all the great ideas developed without and sometimes at their expense: democracy, economic development, well-being, justice, family, religion, etc" (Varela, 2019, p. 27). In this sense, the cultural construction of women has to be demolished by questioning all the institutions in which patriarchy manifests itself, which is the germ of the oppression in which women have been involved for years.

# 3. Defense of the hypothesis

With regard to the issue being addressed, the following thesis is defended: there is conflict between feminist ideology and patriarchy in the Fang culture of Equatorial Guinea because men want to continue to oppress women.

The only way it can be avoided is by eliminating the culture that has been inherited. The problem lies in the way in which culture conceives men and women, assigning them roles based on their gender. It is the arbitrariness of culture that causes women to subsume the way in the terrible behavior they receive from men. The importance of women is linked to their motherhood, in fact, they are valued because they are able to procreate. For that to change, women need to receive a feminist education that helps them get out of the patriarchal they are immersed in. In this sense, it is answered to those who deny that the woman is subordinated to the man, obliged to unquestionably respect what his master says. For some Guineo-Ecuadorian writers, women enjoy the same rights and opportunities as men. Feminist education means that women should be educated as a person who has rights and deserves to be treated with respect and dignity, something that is very blurred in this culture in which men set the guidelines.

The enormous sociocultural differences between men and women have always been established by looking at men. That means that they assume the entrustment of caring for the woman, since it is impossible that she can do it alone. The order established by the great patriarchs makes it difficult to emancipate women. This order is so well established because it is fostered by patriarchy, "a system of male domination that determines the oppression and subordination of women" (Varela, 2019, p. 109). Raising women's awareness of their situation in this culture means revolutionizing everything because things are made to privilege man as the protagonist of history and all the great exploits of this ethnic group,



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everything is circumscribed around the man, and if for some reason the woman is mentioned it is simply to evoke her motherhood. This is not uncommon, because the asymmetry in the relationships between men and women characterizes this culture, which inevitably leads to the appearance of unequal treatment for women.

One of the great achievements that feminist ideology has had in Equatorial Guinea is to have made the private public. The Fang woman leaves the private to the public because she previously had restricted access to places that were considered as public as the *abaa*, the house of the word, where the most pressing issues of the villages were discussed. Today feminism has allowed this to change and women have been determinedly given their commitment to the path of equality, even if there is strong patriarchal resistance. Therefore, it cannot be said that there is no discrimination against women in the Fang culture. In fact, there are authors who try to manipulate reality with statements such as:

The Fang woman is not a commodity that is bought and sold, nor is it a worker; she is a wife and a mother. It is the essential element for the clan's growth and perpetuity. She is able to take responsibility and actively contributes to her husband's reputation and her own (Abuy, 1985, p. 30).

Nzé Abuy's approach presents many sexist indications. For example, that the woman is a wife and mother to contribute to her husband's reputation. The Fang woman is assigned only the role of mother. Her only task is to bring many children into the world for the continuity of the clan. There is no other purpose because her passage through this life will only be reflected in being a mother.

The woman was regarded as a good, i.e., a kind of heritage of the tribe and the family. The estate available to polygamous is not only nourished by economic goods, but to the number of children and the staff of wives (Mve, 1981, p. 36).

The above quotation allows to argue that a good can be acquired in different forms. Previously, perhaps the woman was not an object of purchase, although it is not to clear because the current Fang marriage, despite the small differences it presents from the old, is but the replica of what the ancestors did, i.e., they got married by the dome, which consisted of a symbolic object that the man's family gave to that of the woman he wanted to marry.

Obviously, the Fang man likes to have lots of wives, as Constantino OCHÁA MVÉ reminds in the quote above, i.e., the man wants lots of wives to give him many children, there is no other reason except that. A woman is bought to have children. Therefore, "some women in their youth were forced to undergo certain magical treatments aimed at suggesting them so that they would consider their sex for essentially procreative purposes" (Mve, 1981, p. 56). It has been said to buy the woman because the existence of the dowry is the previous step towards discrimination and subordination suffered by women. No matter how much explanation is to be made of the dowry as a cultural element and symbol of union in the Fang culture, the dowry gives man the power to decide and make decisions in the life of a woman because it seems an object that is bought. The existence of the dowry in the Fang marriage is explained as follows:

The dowry is especially important among the Fangs, it is the money that the family of the future husband must pay to the family of the future wife, it is so relevant that without dowry there is no marriage. Its price may



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Revista Cátedra, *3*(1), pp. 15-26, January-April 2020. e-ISSN:2631-2875 DOI: <u>https://doi.org/10.29166/10.29166/catedra.v3i1.1923</u> fluctuate depending on the woman's age, whether or not she has children (Mekuy, 2019, p. 1).

Although the dowry is a symbol of union between two families, even more so, between tribes, it can also become an instrument of oppression and torment in the life of the Fang women. Feminist ideology is at a tremendous crossroads when it comes to applying in the Fang culture. The Fang woman is aware that she must change her traditional status to that of empowered woman, and she cannot always remain anonymous to which she has been imposed. Today, it seems that the Fang woman is more empowered than ever, but she must confront the patriarchy, must deal with her tradition and fight with it. The old cultural schemes that demanded the total subordination of women to men are beginning to tremble because many women have begun to question this form of social organization where the woman is only valued because it is her who can bring the world to children, her sole objective. In the patriarchy that occurs in the Fang culture, there is undoubtedly a sexual division of labor, and it must be added the cultural stereotypes of all kinds that are assigned to women. They are no longer willing to tolerate that, so many have found their fight in feminist ideology. Today's Fang woman is increasingly inclined to be a feminist, even if many of them do not know, because unconsciously many women question the established order without knowing that they are changing or struggling to give a new perspective to establish human relations between men and women in Equatorial Guinean society. This is a new generation of women who are unwilling to wait seated and endure any form of violence or discrimination on the part of men. Modern times require to respect the Equatorial Guinean woman as a person and not as an object. The revolution has to be feminist in Equatorial Guinea in order to continue advancing rights because the path so far is incipient, although it must be recognized that much has been achieved, it still needs to be consolidated.

Because of the latter, it is believed that it is the era of the struggle against the patriarchal system to recapture the rights and freedoms of African women in general, and in particular, of the Fang women. It is true that patriarchy is holding up a lot, but the most important thing is to point out that its days are almost over because women support at each other to jointly claim their rights and demand equal opportunities between men and women. Evidently, these feminist ideas find a bad side on the side of men, because they do not want to lose that ancestral privilege they had "inherited", thus, it is not a surprise that there is a conflict of feminist ideology in the Fang culture.

The conflict is due to the rejection of feminism to prevent women from being able to decide for themselves as well. For this reason, it is not surprising that there are still traditions in the Fang culture that only support the idea of subordination and therefore discrimination. This is a globalized world and these are societies where democracy is absented and is hidden and does not consider women's will. Despite all these circumstances, it must be admitted that feminist ideology has been the panacea of many achievements of African women in general, and of the Fang women in particular, thus knocking down the old patriarchy and struggling to construct another kind of patriarchy, the one that even if it follows culture, it is prone to policies of equality between men and women.

# 4. Conclusion

As a starting point, this researched has raised the question of the conflict of feminist ideology in the Fang culture in order to approach the study of patriarchy in Equatorial Guinea. To address this issue, literature was used to lay the foundations on feminist ideology, and then to analyze the manifestation of the patriarchal system in the Fang culture



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Revista Cátedra, *3*(1), pp. 15-26, January-April 2020. e-ISSN: 2631-2875 DOI: <u>https://doi.org/10.29166/10.29166/catedra.v3i1.1923</u> from Guinea Equatorial. For this reason, a thesis has been presented throughout this investigation, because it has been realized that the Fang man wants the woman to be submissive, something that is already difficult because thanks to feminist ideas, the Fang woman is letting go the patriarchal belief. As seen in this article, women are valued solely by their ability to procreate. This emphasizes the importance of women in the Fang patriarchal system. For centuries, patriarchy has convinced the Fang woman that her place is in the kitchen to feed the offspring, take care of the home and her husband.

On the African continent, the feminist ideology that advocates a new way of thinking and understanding life is adjusted to the reality that African women live within their context, giving rise to what is known as African feminism, which has allowed all African women in general, and particularly the Fang woman, to fight for respect of their dignity as a human person. Today's Fang woman is no longer in support of the cultural burden imposed on her by the unfounded patriarchy. In fact, she is revealing against oppression by demanding not to have to marry if she does not want to, not having to serve only to give birth, not to have to endure the polygamy, the levirate, and the different types of rites to which she is subjected.

It is therefore not uncommon for today's Equatorial Guinean society to experience an authentic conflict between feminist ideology and patriarchy. Modern times demand the abandonment of aberrant cultural practices that denote women's freedom. Therefore, feminism and patriarchy are incompatible, in fact, it has been argued that there is conflict because two positions are completely opposed in the Fang culture, feminist ideology and patriarchy are mentioned, which cannot currently coexist together. While it is true that patriarchy is trying to rearm itself against feminist ideology, it is clear that the Fang woman has decided not to take any step back. Therefore, it is necessary for the Fang woman to continue to bet on empowerment to prevent any woman from having to go through the behavior she has been subjected to for years by the patriarchal system that she is intended to eliminate. Everything that has been achieved in favor of the empowerment of Fang women is very important because it is intended to bring about a new society where women do not have to be discriminated against because they are women. Fang culture is very conservative to easily yield to progressive ideas, in which women are not regarded as an object but rather as a human person deserving a decent treatment for their status as a person.



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# Uso de SCRATCH en el aprendizaje de Programación en Educación Superior

# Use of SCRATCH in Learning Programming in Higher Education

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## Resumen

En los últimos años, el término pensamiento computacional y el lenguaje de programación Scratch han irrumpido en el escenario de la enseñanza, primordialmente a nivel de educación básica y bachillerato. Sin embargo, no se evidencian estudios que fundamenten el uso del lenguaje Scratch a nivel superior, por lo que, se constituyó en objetivo de la presente investigación, la verificación del desarrollo del pensamiento computacional entre los estudiantes de Primer Semestre de la Carrera de Informática de la Universidad Central del Ecuador con base a las ocho dimensiones del pensamiento computacional que son: identificación de patrones, uso de instrucciones, variables, secuencia, operadores, reuso, abstracción y funcionamiento y detección de errores. Con esta finalidad se aplicó un diseño cuasiexperimental con preprueba-postprueba y grupos intactos, con enfoque cuantitativo, de campo con apoyo documental y de nivel explicativo. Posteriormente, para los análisis estadísticos se utilizó la herramienta SPSS, tanto para el cálculo de las medidas de tendencia



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Revista Cátedra, *3*(1), pp. 27-45, January-April 2020. e-ISSN: 2631-2875 DOI: <u>https://doi.org/10.29166/10.29166/catedra.v3i1.2006</u> central y la desviación estándar, así como en la comprobación de las hipótesis mediante pruebas T y en la elaboración de figuras estadísticas. Los resultados obtenidos evidenciaron un mayor desarrollo en los niveles del pensamiento computacional con los estudiantes de Primer Semestre de la Carrera de Informática de la Universidad Central del Ecuador que emplearon Scratch.

# Palabras clave

Computación, enseñanza, lenguaje, pensamiento, programación, Scratch.

## Abstract

In recent years, the term computational thinking and Scratch programming language have broken into the teaching stage, primarily at the level of elementary and high school education. However, there are no studies that support the use of Scratch language at a higher level, thus the aim of this research was the verification of the development of computational thinking among the students of the First Semester of the Computer Science Degree of the Central University of Ecuador based on the eight dimensions of computational thinking that are: identification of patterns, use of instructions, variables, sequence, operators, reuse, abstraction, operation and error detection. For this purpose, a quasiexperimental design with pre-test-post-test and intact groups was applied, with a quantitative, field approach with documentary support and explanatory level. Subsequently, the SPSS tool was used for the statistical analyzes, both for the calculation of the measures of central tendency and the standard deviation, as well as in the verification of the hypotheses by means of T tests and in the elaboration of statistical figures. The results obtained evidenced a greater development in the levels of computational thinking with the students of the First Semester of the Computer Science Career of the Central University of Ecuador who used Scratch.

## Keywords

Computing, teaching, language, thinking, programming, Scratch.

## 1. Introduction

In recent years, questions such as the following have been discussed by organizations related to the educational field: what are the capacities, abilities, skills, competencies that students must achieve through education in the 21st century? How important is it for the development of people in contemporary society? To answer these questions, several scenarios and multiple proposals on the subject have been proposed; However, there is one that shows a lot of interest for its repercussions, not only in the educational aspect, but in all areas of life called computational thinking.

Computational thinking is a term that Zapotecalt (2015) describes as "a process of problem solving" (p. 12) that involves the development of skills such as: the approach or formulation of problems, using computers for analysis, modeling and resolution. He proposes to organize data in a logical way and then represent them by means of abstractions, arriving at his modeling, algorithmization and finally "generalizing and transferring this problem-solving process to a great diversity of these" (Zapotecalt, 2015, p. 13).



This criterion on the unlimited potential of computing for problem solving led the International Society for Technolgy In Education (ISTE) and the Computer Science Teachers Association (CSTA) to operationalize the concept of computational thinking. In this way, educators of different levels understand what the subject is about and could develop it with their students, expanding their abilities, their creativity and taking advantage of the mainstreaming of information technology in all areas of knowledge.

Also, as an important antecedent for the formulation of computational thinking, Pérez (2017) points to the Third International Conference of Informatics in secondary schools, held in 2008 in the city of Turon, Poland:

Where several experts analyzed the advantages and difficulties of starting programming learning at an early age with the intention of promoting the development of skills related to computational thinking in students to develop in an environment where the presence of computer technology is increasingly common and important (p. 23).

The need for a second education in computing is mentioned, where the teachers who master this area of knowledge are the bridge that relates other people to the understanding of the principles of computer science. This intention is evidenced in the formulation of a curriculum that exceeds the limitations of the current ones, in which only the management of ICT is taught.

Mittermeir and Syslo (2008) summarize the generality of the conferences by pointing out "several authors in these participations respond to these problems by addressing the question of what computer education has to offer young people to go beyond the skills of how to they use computers. "(p. 3). Facing this situation, there is a need for research that establishes the advantages of using symbolically mediated tools for programming learning as considered in the Scratch programming language. It is also necessary to determine Scratch's contribution to the development of skills such as modeling, abstraction, pattern recognition, as well as improving values such as cooperative work, tenacity and perseverance in the teaching-learning process.

When doing research based on scientific principles, a critical position is assumed, which Martínez (2001) claims when he proposes not to accept technology as an obligation or simply to oppose it as considered dehumanizing, but that "the incorporation of technology must go preceded by a critical analysis of the needs to be covered with it and the implications that its use has, being willing to accept its consequences "(p. 197). Taking into account that recommendation and knowing that learning is made up of several curricular elements such as content, methodologies, resources among others; It is precisely in this last component that the research aims to validate the use of Scratch 2.0 as a tool that contributes to the formation of future IT teachers in the development of the cognitive, procedural and emotional fields in an encompassing way.

In this sense, the article is structured so that, initially, related studies and educational experiences about computational thinking are presented, after that, concepts and definitions regarding the elements of computational thinking are presented. Next, the methodology used for the design of the research that was carried out with a quantitative field approach with documentary and explanatory level support is presented, followed by the results obtained, and finally the conclusions obtained are presented.

The objective of this research is to verify the significant difference in the development of computational thinking in students who use Scratch for learning Programming compared



to those who do not use it, that is, it is to analyze a before and after the application of a intervention program.

# 2. Related Concepts

### 2.1 Scratch

As indicated by Pascual (2015) Scratch "is a programming language developed by a research group of the Massachusetts Institute of Technology (MIT), its main feature is its visual and multimedia programming environment that allows you to create programs easily and intuitively through a graphical interface "(p. 1).

López (2015) indicates that the Scratch tool "makes programming more fun for anyone who faces learning to program for the first time" (p. 11), and considers that this tool was designed to express ideas creatively with the objective of encouraging the development of logical and computational thinking skills.

Scratch is a new programming environment and as Alba (2008) mentions, "it uses the metaphor of embedded pieces to animate objects that are on the screen and shows all the necessary elements of use such as the stage, the objects and the elements of the language "(p. 1).

Isuri Sormenezko Zerbitzuak in Scratch Teaching Guide for Teachers (2010) mentions: "Scratch helps to easily understand mathematical and computer concepts that are very well integrated into the program, such as: interactive processes (loops), conditional criteria (yes, then , yes-no), the coordinates in a plane, the variables, etc. "(p. 4-5), in this way these concepts can be learned within a meaningful and motivating context, since it will not be the same to understand the meaning of the use of the variables in the traditional programming, that when they are being used for the control of visualization of some animation that is being created at that moment.

The Scratch tool works through the creation of projects, based on a main idea, along with modeling and experimentation, to achieve a final product, these project design processes as mentioned in Scratch Teaching Guide for Teachers (2010), "Develop the necessary skills to get to have: a creative thought, a logical thought, a development of ideas, from its initial conception to the finished project, a clear communication, a systematic analysis, capacity for collaboration, an interactive reflection., etc. "(p. 6-7).

Scratch allows you to learn to program through experimentation creatively, which helps the development of logical thinking and better understand computational functioning. In addition, it allows the development of mental skills, favoring the understanding of the fundamentals of programming.

## 2.2 Computational Thinking

Computational thinking is the ability that individuals have to solve problems through the use of technology, so one of the promoters of computational thinking, Wing (2006) points out that "computational thinking involves solving problems, designing systems and understanding human behavior, making use of the fundamental concepts of computer science "(p. 33), that is, the essence of computational thinking is to think like a computer scientist when it comes to solving a problem. Wing (2006) says that computational thinking is a way of thinking and "that these are useful skills for everyone, not just for computer scientists." (P. 33).



The definition of computational thinking that is considered the most appropriate, is that given by Jeannette Wing (2006), Corporate Vice President of Microsoft Research and Professor of Computer Science Department Carnegie Mellon University, who popularized the term in his Computational Thinking article, stating that "the computational thinking represents a universally applicable attitude and a set of skills that everyone, not just computer scientists, would be eager to learn and use." (p. 33).

A concept that comes from the computational world is the one pointed out by Raja (2014) that indicates "the computational approach is based on seeing the world as a series of puzzles, which can be broken into smaller pieces and gradually solved through of logic and deductive reasoning "(p. 1), so, the computational approach is an intuitive way to address several of the existing methods of learning psychology.

Thus, it is possible to point to the eight dimensions that define computational thinking that are:

- 1. Identification of patterns. It consists of extracting information from objects that allow to establish properties between sets of said objects.
- 2. Use of instructions. Set of data inserted in a structured sequence for the processor to interpret and execute.
- 3. Variables. Corresponds to the area reserved in the main memory of a computer.
- 4. Sequence. It is a series or sequences of elements.
- 5. Operators. They are symbols that indicate how operands should be manipulated.
- 6. Reuse. Corresponds to reuse.
- 7. Abstraction. It consists of isolating an element from the rest of the elements that accompany it.
- 8. Operation and error detection. It consists of detecting and controlling errors.

## 2.3 Ubiquituous Technology

The idea of ubiquitous technologies was introduced by Weiser (1991), who described ubiquitous technologies as "environments surrounded by computers, and communication networks, in conjunction with the interaction of human beings." (P. 1-10). Pérez and Addati (2013) notes that "ubiquitous technologies give us a new vision of society, seen through the improvements that occur in the quality of life of citizens. It can be said, then, that the ubiquity of technologies is given by the availability of services, processes and information linked to them anywhere and at all times "(p. 2), so this type of technology helps to improve the quality of life of people through the use of tools that allow managing information in an easier and more efficient way, and also that they can be used at any time and place.

The ubiquitous technology will allow the emergence of new applications where all objects are functioning integrated, which will lead to a huge commercial, economic and social opening.

# 3. Related Studies

Among the important educational experiences in Latin America about computational thinking is Mexico, with the National Institute of Astrophysics, Optics and Electronics, based in Puebla. It is one of the references in the work on the topic of development of online courses, texts, collection of experiences such as simulations, projects, events among others, which have been proposed as an objective to modify the reality of the country in the use of Information Technology.



In 2015, an investigation carried out by Hitschfeld, Pérez and Simmonds documents an experience in Chile carried out with school-level students, and expresses a concern when referring to the need for an educational leap in students, from consumer of technology to generator of technology, the authors point to programming as a source of knowledge that makes it possible to generate these changes, mainly if working with the little ones without waiting for them to arrive at the university (Hitschfeld, Pérez and Simmonds, 2015). The authors believe that most people can use ICT in everyday situations, but if the problem is different from the usual, their response capacity decreases; because the continuous work in usual tasks or mechanized actions does not contribute to the development of skills such as abstraction, logical organization of data, pattern recognition, algorithmization, modeling and generalization, not to mention the low importance acquired by the practice of values. In the words of, Hitschfel, Pérez and Simmonds (2015) the "confidence in the management of complexity, persistence in working with difficult problems, tolerance to ambiguity, ability to deal with open problems, and ability to communicate and work with others to achieve a common goal or solution."(p. 31-32).

In Ecuador, educational experiences in computational thinking are scarce and isolated, mainly related to the use of Scratch, language and tool that Pérez and Roig (2015) describe for their interaction with the user as "symbolically mediated programming environments" (p 6), due to its graphical interface characteristics, object-oriented programming using predesigned blocks and intuitive environment designed by the Massachusetts Institute of Technology (MIT) and which has now reached a high level worldwide.

The Polytechnic School of the Coast (ESPOL) and Yachay University, each on their own, have developed projects related to the use of Scratch. Both the projects developed by ESPOL and those of Yachay are fundamentally oriented towards children learning Scratch as a programming language to elaborate projects, but they do not clearly demonstrate the intention to develop computational thinking, which leads them to think that they continue to pay more attention to the teaching of the computer tool that to the possibilities considered within the computational thinking for the student, that is, they do not reach the integral proposal of the ICT in the education of which Cabero et. al (2003), which exposes the importance of observing the educational process from all its components and relationships, for the author the problem lies in:

the lack of teacher training for their educational incorporation to grant more significance than those they have as curricular instruments, to reproduce with them traditional educational models and not intended for the communicative possibilities of ICTs, and to use their own organizational principles on them an analog and non-digital school (p. 18).

The Computer Science Department of the Faculty of Philosophy of the Central University of Ecuador, trains professionals to be teachers in this area of knowledge since 1996, in recent times it presents difficulties in the development of skills related to computational thinking with its students . Currently, the career continues using traditional tools for learning programming and algorithm design being the most applied and current, so to speak, Data Flow Diagram (DFD) and PSeint with the difficulties it presents in its use. In addition, errors of symbologies are observed, since they are oriented to a paradigm little used in programming.



# 4. Methodology

The research design corresponds to quasi-experimental with pre-test-post-test and intact groups, with quantitative, field approach with documentary support and explanatory level.

The population selected were the students of the First Semester of the Computer Science Degree of the semester April-September 2015, consisting of two courses, the one corresponding to the morning session with the denomination of First Semester A and the second of the evening session called First Semester B The groups were randomly selected, Parallel A was chosen as an experimental group while Parallel B became a control group, both composed of a total of 40 students.

Next, table 1 is shown where the general population total is summarized and classified by gender, establishing the number and percentage of male and female participants.

		Frecuency	Percentage	Valid Percentage	Acumulated Percentage
Valid	male	64	80.0	80.0	80.0
	female	16	20.0	20.0	100.0
	Total	80	100.0	100.0	

Table 1. Population

In relation to the ages of the participants in the experimental group, it is established as shown in Table 2 that the average is 19.9 being the most frequent age among participants 19 and 20 years.

		Frecuency	Percentage	Valid	Acumulated
				Percentage	Percentage
Valid	18	7	17.5	17.5	17.5
	19	12	30.0	30.0	47.5
	20	12	30.0	30.0	77.5
	21	3	7.5	7.5	85.0
	22	3	7.5	7.5	92.5
	23	1	2.5	2.5	95.0
	24	1	2.5	2.5	97.5
	26	1	2.5	2.5	100.0
	Total	40	100.0	100.0	

Table 2. Ages of the experimental group population

According to Table 2, the ages of the participants of the control group average 20.28 and the most frequent age among the group is 19 years.



		Frecuency	Percentag	Valid	Acumulated
			e	percentage	percentage
Valid	18	10	25.0	25.0	25.0
	19	11	27.5	27.5	52.5
	20	3	7.5	7.5	60.0
	21	5	12.5	12.5	72.5
	22	5	12.5	12.5	85.0
	23	4	10.0	10.0	95.0
	25	1	2.5	2.5	97.5
	30	1	2.5	2.5	100.0
	Tota	40	100.0	100.0	
	l				

Table 3. Ages of the population of the control group

In relation to the objective, regarding the verification of the development of computational thinking between the control and experimental group, the hypothesis was established: There are differences in the development of the computational thinking skills of the First Semester students of the Computer Science Career of the Central University of Ecuador.

#### 4.1. Instruments for information gathering

Three instruments were designed to collect information with different intentions: a satisfaction scale questionnaire about the skills of computational thinking that students consider to possess, and two questionnaires of problems related to computational thinking. These instruments served to establish the advances in the aforementioned skills, and were applied at different times in the research process.

The pretest and posttest tests were organized by the structured base test model with questions or reagents of direct questioning, each questionnaire consists of sixteen problems. Andrade (2013) mentions that the difference between objective and structured-based tests is that the second "privileges cognitive processes of a higher level than simple knowledge by memorization" (p. 4), which allows to develop knowledge and improve skills to assimilate and process information.

The first instrument was applied at the beginning of the investigation and another of similar characteristics was applied at the end, in order to compare the results with respect to the control and experimental group.

The criteria that guided the structure for the elaboration of the problems in both instruments were the eight dimensions of computational thinking that are: identification of patterns, use of instructions, variables, sequence, operators, reuse, abstraction and operation and detection of errors on the that two problems were formulated for each dimension selected. It is necessary to point out that, the level of difficulty of the problems is basic or initial, since they are first semester students very few of them know about programming, so applying an instrument of greater difficulty in the problems would not have been consistent with the degree of knowledge of the participants and their understanding, this in no case affected the scientific character and its validity.



For the statistical analyzes, the SPSS 20 tool was used both for the calculation of the measures of central tendency and the standard deviation, as well as in the verification of the hypotheses and the elaboration of statistical figures where the comparison of means by means of T tests was applied.

Once the information from the survey, the pretest and posttest questionnaire was collected, they were admitted to three different matrices, assigning each student a numerical code that identifies them and another one for gender, so that it is possible to group them later based on said variable.

In the implementation stage the following activities are carried out:

- 1. Temporalization of the activity in relation to the planning of the subject during the semester. Specifically, Programming I contains a unit called Problem Solving Technique, where the work with algorithms is approached, an appropriate scenario for the investigation of the computational thinking and Scratch variables, which has a duration of approximately one month and a half, time with which Research to carry out the experience with the students.
- 2. Design of the microcurricular planning for each session applying the constructivist methodology known as the learning cycle or ERCA.
- 3. Selection of activities and problems to work in each session.
- 4. Realization of planned activities with the intervention of the Scratch tool, took place during seven sessions that began on April 27, 2015 and ended on June 8, 2015. Each session lasted three contact hours and hours of autonomous work that students did when solving problems proposed both individually and collaboratively.

Date	CONTENT	PROPOSED PROBLEMS		
27-04-2015	- Problem solving	Three algorithms with the model of data		
	process.	entry, processes and outputs.		
	- Definition of algorithms.			
	- Characteristics			
	- Phases of the Polya			
	Method.			
	- Entry and exit of			
	information.			
04-05-2015	- Mathematical	Five problems that include graphing,		
	operations.	movement and mathematical		
	- Graphing shapes with	operations		
	scrolling Scratch objects.			

The contents and problems proposed in each session are shown in Table 4



11-05-2015	- Simple conditions	Four problems that with decision
	- Composite conditions	making, mathematical calculations and
	- Nested conditions.	screen movements with changing
		scenarios and objects.
18-05-2015	Composite conditions	Six problems that include decision
	Nested conditions.	making, mathematical calculations,
		simulations, changes of scenarios and
		objects.
25-05-2015	Composite conditions	Five problems that include decision
	Nested conditions.	making, mathematical calculations,
		simulations.
01-06-2015	Repetition Loops Defined	Four problems that include repetition
01-00-2013	Repetition Loops Defined	Four problems that include repetition
		structures, mathematical operations
		and objects displacement.
08-06-2015	Defined and undefined repeat	Six problems with indefinite repetition
	ties	ties that simulate real situations and
		games.

Table 4. Organization of the intervention process

### 5. Results

In search of similarities or differences between the control and experimental group, a comparison of the results by dimensions of computational thinking was made using measures of central tendency such as mean and standard deviation, assuming similar when there is a difference of  $\pm$  0.1. This is how Table 5 is shown, shown below:



					Informe				
GROUP		IDEN	USE	VARI	SEQU	OPERA	REUS	ERRO	ABSTRA
		Т	OF	ABLE	ENCE	TORS	Е	R	CTION
		PATT	INSTR	S				DETE	
		ERNS	UCT.					CTION	
	Media	.43	.66	.76	.64	.60	.45	.67	.59
N CONTROL	Ν	80	80	80	80	80	80	80	80
	Desv. típ.	.497	.476	.428	.484	.493	.501	.471	.495
	Media	.75	.67	.79	.61	.60	.53	.55	.64
IIME	Ν	80	80	80	80	80	80	80	80
EXPERIMEN	JU Desv. típ.	.436	.471	.412	.490	.493	.503	.501	.484
	Media	.59	.67	.78	.63	.60	.49	.61	.61
	Ν	160	160	160	160	160	160	160	160
Total	Desv. típ.	.494	.472	.419	.486	.491	.501	.489	.489

Table 5. Comparison of average control and experimental groups

Table 5 shows the means of each dimension of computational thinking considered in the research for the control and experimental group obtained at the end of the investigation, according to the following detail:

- In the pattern identification dimension, the mean of the control group corresponds to  $.43 \pm .497$  and of the experimental group corresponds to  $.75 \pm .436$ , the results show that the experimental group reaches an average higher than that of the control group.
- In the instruction use dimension, the mean of the control group corresponds to .66  $\pm$  .476 while the average of the experimental group corresponds to .67  $\pm$  .471, so that the values allow to consider slightly higher than the experimental group.
- In the variable dimension, the mean of the control group corresponds to  $.76 \pm .428$  while in the experimental group it corresponds to  $.79 \pm .412$ , values that allow it to be considered slightly higher than the experimental group.
- In the sequence dimension, the mean of the control group corresponds to  $.64 \pm .484$  while in the experimental group it corresponds to  $.61 \pm .490$ , values that show a slightly higher level of the experimental group.
- In the operators dimension, the mean of the control group corresponds to  $.60 \pm .493$  while in the experimental group it corresponds to  $.60 \pm .493$ , values that are similar.
- In the reuse dimension, the mean of the control group corresponds to  $.45 \pm .501$  while in the experimental group it corresponds to  $.53 \pm .503$ , a higher score of the experimental group is shown.



- In the error detection dimension, the mean of the control group corresponds to .67 ± .471 while in the experimental group it corresponds to .55 ± .501, a higher score of the control group is shown.
- In the abstraction dimension, the mean of the control group corresponds to .59 ± .495 while in the experimental group it corresponds to .64 ± .484, a higher score of the experimental group is shown.

In summary, the values of the mean of each dimension of computational thinking corresponding to the experimental group are equal to or greater than the means obtained by the control group, except in the cases of the sequence and error detection dimensions, where the control group shows a higher value

Inference statistics were also used to verify results, where the aforementioned hypothesis was worked on

H1: There is a significant difference in the development of computational thinking among students who use Scratch in learning Programming in relation to those who do not use it.

The mathematical expression for the hypothesis is: H1:  $\mu e \neq \mu c$ 

Where  $\mu e$  corresponds to the value of the difference of the experimental group,  $\mu c$  corresponds to the value of the difference of the control group.

Null hypothesis formulated corresponded to:

H0: There is no significant difference in the development of computational thinking among students who use Scratch in learning Programming in relation to those who do not use it.

The mathematical expression for the hypothesis is: H0:  $\mu e = \mu c$ 

For the statistical check, the normality was first checked by means of the Kolmogorov and Smirnov test, relating the group variables and the difference obtained from the subtraction between the posttest mark and the pretest note, the result of which is shown in the following table:

	GROUP	Kol	mogor	ov-Smir	nov <sup>a</sup> Shapiro-Wilk				
		Estatistic		gl	Sig.	Estatistic		gl	Sig.
		al			al				
[1]	EXPERIMENT	.154	4	.017		.948	40	.066	
ENCI	AL		0						
DIFFERENCE	CONTROL	.140	4	.045		.982	40	.757	
DIFI			0						
a. Lilliefors significance correction									

Table 6. Normality tests

Table 6 shows the results on normality between the control and statistical groups, obtaining a significance of .017 for the control and .045 for the experimental, which is why the hypothesis that the data comes from groups with different normality.

As a next step prior to the selection of the statistic for hypothesis testing, the test of variances between the groups was performed, the results are shown in the table below:



		Levene's T test for equality of means							S	
		test	for							
		equa	lity							
		of								
		varia	nce							
		S								
		F	Si	t	Gl	Sig.	Mean	Тур.	95	5%
			g.			(bila	differ	error	Confi	dence
						teral	ence	of	interv	val for
						)		the	tl	ne
								diffe	diffe	rence
								renc	Infe	Sup
								e	rior	erio
										r
DIFFER	Equa	13.	.0	-	78	.306	-	1.06	-	1.02
ENCE	1	85	0	1.			1.093	18	3.2	02
	varia	5	0	03			8		077	
	nces			0						
	have									
	been									
	assu									
	med									
	Equa			-	65.	.307	-	1.06	-	1.02
	1			1.	22		1.093	18	3.2	67
	varia			03	7		8		142	
	nces			0						
	have									
	not									
	been									
	assu									
	med									

Table 7. Independent sample tests

Table 7 shows the results for the Levene variance test that reaches a significance of .000, which is why the hypothesis that both groups have different variances is not ruled out.

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Revista Cátedra, *3*(1), pp. 27-45, January-April 2020. e-ISSN: 2631-2875 DOI: <u>https://doi.org/10.29166/10.29166/catedra.v3i1.2006</u> With these results it can be established that the groups are not parametric, so, the test of hypothesis test called U of Mann Whitney was selected by the number of students, also because the data were considered independent samples, in addition, the variable organizes the numerical type and corresponded to a longitudinal study.

Based on the SPSS statistical software, the result expressed in Table 8 was obtained for the proposed work hypothesis:

Null hypothesis	Test	Sig.	Decition	
The	Mann-	.728	Retain	
distribution	Whitney U		the null	
of	test of		hypothe	
DIFFERENC	independent		sis	
E is the same	samples			
among the				
GROUP				
categories				

#### Table 8. Hypothesis testing

According to Table 8, the significance value of .728 is obtained, which is interpreted as not enough evidence to rule out the null hypothesis.

Therefore, it is considered that between the notes of the control group and the notes of the experimental group there is no significant difference in the development of computational thinking using Scratch in Programming learning.

### 6. Discussions and Conclusions

The comparison of means in the responses of the control and experimental group was presented in Table 5, based on these results, improvements are evidenced in the dimensions identification of patterns, use of instructions, variables, use of operators and error detection in the group that used Scratch in learning Programming. The group that did not use Scratch shows to maintain the same development or improve in the other four dimensions: identification of patterns, use of instructions, variables and error detection so it could be assumed that there is a difference, although not significant between the groups. However, when performing the hypothesis testing test shown in Table 8, it is established that the evidence is scarce to reject the null hypothesis. Therefore, it is assumed that there is not enough evidence to state that Scratch directly helps the development of computational thinking at all levels considered in the investigation.

In comparison to what Sáez, Miyata and Domínguez (2016) report in their research on the creation of multimedia codes through Scratch with students of higher education where they point out "From the results of the Student's t-test, it can be affirmed that there are significant improvements in the results of the administered test, so the program improves students' ability to understand the management of Multimedia Content Programming with Scratch.



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Revista Cátedra, *3*(1), pp. 27-45, January-April 2020. e-ISSN:2631-2875 DOI: <u>https://doi.org/10.29166/10.29166/catedra.v3i1.2006</u> "(p. 154), the same results are not observed. Probably some of the causes that originate the different results are due to the origin of the participants, in the case of the research that was mentioned the selected population corresponds to 113 students, among men and women, who voluntarily participate in the EUROMIME program at postgraduate level that strengthens the knowledge in Computer Science of professionals related to the technological branch, while the students who were part of the research at the Central University of Ecuador correspond to the initial level in the Computer Science Career where many of them have not had previous experiences in relation to the creation of programs.

There are not many investigations of the Scratch tool applied at a higher level with which to compare the results, in this regard Taborda and Medina (2012) also agree on this difficulty and express that "nonetheless, and despite the wide acceptance it has had in the community of educators, we have not found published research that has informed about the impact that the use of SCRATCH generates in the classroom. "(p. 6). Another position regarding the formulation of problems that allow us to better observe other aspects of computational thinking to be evaluated is proposed by Nancovzka, Ternik, Koron and Koron (2017) that express "there are several ways to improve the scaffolding of cognitive development for young people Scratch programmers. One is to introduce exercises focused on parallelism and synchronization, such as asking students to explain parts of the code. Another way is to ask students to find errors in a code "(p. 10).

As mentioned there are several contributions, but mainly at the level of basic and initial education, others in relation to interest and motivation such as the work of Pérez and Roig (2015) on programming environments not symbolically mediated where the opinion of students is collected of the initial level of the Computer Science Career, about the use of Scratch who consider that "it facilitates the work by its interface, also develops creativity and collaborative work" (p. 16). This leads us to consider that the validity and potential of the Scratch tool is not so evident in all the dimensions of computational thinking that are part of the research, but in certain aspects such as improving motivation, interest, creativity and imagination and facilitating the management of sentences by not concentrating the attention of the students in the syntax as in other programming languages.



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## Análisis de la educación intercultural bilingüe en las instituciones educativas de la nacionalidad Tsáchila, Ecuador

## Analysis of intercultural bilingual education in educational institutions of the Tsáchila nationality

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### Resumen

La Educación Intercultural bilingüe (EIB) en Ecuador se ha convertido en un foco de discusión de la educación ecuatoriana debido a la convivencia de los pueblos y nacionalidades que coexisten en un mismo territorio. Uno de los principales problemas radica en el hecho de desconocer mecanismos de planeación y ejecución de políticas educativas incluyentes dado el encuentro de culturas donde la mestiza tiene prestigio y predominio sobre las demás. Por esta razón, es importante hacer visible la necesidad de la inclusión de los saberes ancestrales de la nacionalidad Tsáchila como eje transversal curricular dentro del proceso educativo intercultural bilingüe. Es necesario, entonces, evaluar la EIB, conocer cómo se expresan los saberes ancestrales en la educación e identificar las experiencias de la aplicación del Modelo del Sistema Educativo Intercultural Bilingüe (MOSEIB) en las instituciones educativas de las comunidades de la nacionalidad



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Revista Cátedra, *3*(1), pp. 46-58, January-April 2020. e-ISSN: 2631-2875 DOI: <u>https://doi.org/10.29166/10.29166/catedra.v3i1.1988</u> Tsáchila en el año lectivo 2018-2019. En este camino se identifican los elementos inclusivos del eje curricular transversal intercultural que deben ser fortalecidos en el Bachillerato General Unificado (BGU) para contribuir a la recuperación de la identidad cultural Tsáchila, bajo un enfoque socio-educativo, cualitativo, descriptivo y explicativo del proceso de enseñanza aprendizaje con el MOSEIB. Se han analizado sus causas, lineamientos y, recolectado información primaria y secundaria, a través de las técnicas de observación (colonos), encuesta (estudiantes), entrevista (docentes) y grupo focal (expertos). Su trascendencia radica en el aporte a la recuperación de la ancestralidad y la lucha contra la discriminación -particularmente en el ámbito educativo-.

### Palabras clave

Ancestralidad, discriminación, etnia, interculturalidad, MOSEIB.

### Abstract

Bilingual Intercultural Education (BIE) in Ecuador has become a focus of discussion due to the coexistence of people and nationalities that coexist in the same territory. One of the main problems lies in the fact of ignoring mechanisms of planning and execution of inclusive educational policies given the encounter of cultures where the mestizo has prestige and dominance over the others. For this reason, it is important to make visible the need for the inclusion of the ancestral knowledge of the Tsáchila nationality as a curricular transversal axis in the bilingual intercultural educational process. It is necessary to evaluate the BIE, to know how ancestral knowledge is expressed in education and to identify the experiences of the Model application of the Bilingual Intercultural Educational System (MABIES) in the educational institutions of the Tsáchila nationality communities in the year 2018-2019. In this way, the inclusive elements of the cross-cultural cross-curricular axis that must be strengthened in the Unified General Baccalaureate (BGU) are identified to contribute to the recovery of the Tsáchila cultural identity, under a socio-educational, qualitative, descriptive and explanatory approach of the teaching-learning process with MABIES. Their causes, guidelines and, primary and secondary information, have been analyzed through observation techniques (settlers), survey (students), interview (teachers) and focus group (experts). Its importance lies in the contribution to the recovery of ancestrality and the fight against discrimination -particularly in the educational field.

### Keywords

Ancestrality, discrimination, ethnicity, interculturality, MABIES

### 1. Introduction

The BIE has become the focus of discussion of Ecuadorian education due to the convergence of 14 nationalities, with their corresponding languages in the same territory. Under this premise, governments on duty have not resolved their limitations on the planning and implementation of inclusive education policies. This is due to ethnic diversity and the encounter of cultures where the prestige and predominance of mestizo is evident. One of



the fundamental problems underlying this fact is the educational system whose daily practice leans more towards the uniqueness of education to the detriment of the development of the other cultures that are increasingly influenced by the dominant culture.

Maintaining the culture of each nationality is a work that surpasses the wills of the communities, the intentions of its members and the state itself. And it is education that has been tasked - in some cases - with diminishing in the worldview of people, their knowledge, and even their social behavior. There cannot be a purist vision of what cultures are today, i.e., it is necessary to understand that many live processes of syncretism in areas such as: beliefs, gastronomy, clothing, health, housing, among others.

Finally, the structure of the manuscript is written. First, a brief description of the origins of education in Ecuador is made. Topics such as the first Organic Law on Public Instruction, the beginnings of Bilingual Intercultural Education, Tsáchilas and the implementation of the Bilingual Intercultural Educational System Model are addressed here. Then, the method that is the description of the research methodology of this work is explained. Finally, the results, the discussion of results and the partial conclusions of this ongoing research are highlighted.

### 2. Origin of Education in Ecuador

The analysis of the origin of education in Ecuador must take into account the evolution and the development of the various Aboriginal cultures - pre-Inca - as well as the development of the colonial and republican era. In the first instance, the ways of educating before colonization were generated in the midst of life, community coexistence and the customs of their people. Orality and farming, hunting and fishing practices were the main sources of learning. In colonial times, teaching occurred in the family nucleus in most cases; and, in a few cases, in convents where they learned to read and write. At this stage, the interests of the ruling classes are further accentuated to the detriment of the interests of ancestral people and workers. The Church's role contributed to the development of education, maintaining a classist vision and mission, causing – in parallel – liberal and rupture dismembering with the colony.

Later, the constitution of the Republican state creates the organization of education as a system. It is covered by the institutionalization of the General Directorate of Studies, and the first Organic Law on Public Instruction (LOIP). The latter, framed in the Liberal Revolution, considers among its most important postulates the institutionalization of normal schools, public education, secular, free and compulsory for all girls and boys aged five to twelve years (LOIP, 1906, p.23). Mentioning these aspects is important in terms of the study of Pedagogy, Social Sciences, higher education, and with it, scientific and technological development. Clearly, Intercultural Education cannot be left out of this process. Currently and in a historical extension process of education with the characteristics of the liberal government of Alfaro, in the province of Santo Domingo de los Tsáchilas – and in the indigenous communities Tsáchilas-, educational institutions are created with the intention of respecting their language and culture.



### 2.1. Intercultural bilingual education

Paraphrasing Cornejo (2008) the first experiences of the BIE arise around the 1940s in Cayambe thanks to the indigenous leader Dolores Cacuango who, with the work of a team of women from Quito created indigenous schools in Pichincha and, later, with the Laurite missionaries extended them to Imbabura. They stopped working around 1963. On the other hand, in 1972 the Shuar-achuar radio schools began operating, becoming official around 1979. The main contribution is the training of indigenous teachers. In addition, the indigenous schools of Simiatug appeared in Bolivar; Cotopaxi Indigenous School System (SEIC); the Federation of Communes Union of Natives of the Ecuadorian Amazon (FCUNAE), in 1975; the Kichwa Literacy Subprogram that began in 1978 with the support of the Center for Research for Indigenous Education (CIEI) program of the Pontifical Catholic University of Ecuador (PUCE) with a considerable number of indigenous leaders; Chimborazoca Caipimi which was a specific program for the Chimborazo province; the Macac National School which in 1986 created technical baccalaureates in the Kichwa language; the Intercultural Bilingual Education Project, with the support of Germany; Alternative Bilingual Education Project (PAEBIC) of the Confederation of Indigenous Nationalities of the Ecuadorian Amazon (CONFENIAE) and which has been in operation since 1986, in eight schools in Napo and Pastaza in 1986; the agreement of the Ministry of Education and Culture (MEC) with the Confederation of Indigenous Nationalities of Ecuador (CONAIE) and thanks to the creation of the National Directorate of Intercultural Bilingual Education (DINEIB), in November 1988; Agreement between the ECM and the National Federation of Evangelical Indigenous People, in 1990 (pp.65-68). The role of the Ecuadorian communists in the indigenous and peasant organization, raising the aspiration of bilingual intercultural education, respecting, recovering and promoting their culture, their language and their ancestral worldview in the education of their people, allowed the operation of the first bilingual Intercultural Schools in the Ecuadorian mountain range. This tour was the first step for the creation of what is known as Bilingual Intercultural Education.

### 2.2. The Tsáchila

Historically, Tsáchila nationality has managed to survive and consolidate since the eighteenth century, through several milestones of recognition and inclusion from the State, asserting itself according to its language, its territory, its cultural customs, its worldview. There are not exact dates that describe its appearance. The first data that tell their existence are those of the ethnologist Paul Rivet in the early twentieth century.

From Ventura's perspective (2012) Tsáchila society is a good example of the shift from a form of self-subsistence production to a market-oriented economy. However, this transformation has not been radical for any of its members, not even for the younger



generations who, while trying to profit from their lands, still prefer to live in communities than abroad<sup>1</sup>.

Particularly in this case, the integration of Tsáchila society as a strategy to protect its territory, to recognize the networks of socio-political organization, the roles of kinship and authority, has allowed to recognize the Governorate of the Tsáchila Nationality. This governorate is subordinate and with partial autonomy, according to the National Institute of Statistics and Census (INEC). In 2010, it is recognized with 2956 inhabitants (1519 men and 1437 women), grouped into seven communities: Congoma Grande (Santo Juan), Los Naranjos, Colorados del Búa, El Poste, Peripa, Chigüilpe, Otongo Mapalí settled in the rural area with approximately 9060 hectares of the canton of Santo Domingo.<sup>2</sup>.

The communal nature of the Tsáchilas has sought to overcome individualism in their forms of survival (typical of family clans and the contradictions of family clans), towards the forms of community work typical of the Andean communities of the Ecuadorian central mountain range. However, at present, several authors and interviewees bear witness to a non-systemic process of progressive dispersion of their cultural elements, the advancement of the influence and ideological forms of Ecuadorian fusion. The education system, including the bilingual intercultural education system, has failed to be the instrument and resource for channeling the cohesion of its cultural nature.

### 2.3. The model of Bilingual Intercultural Education System (MABIES)

The first article of Ecuador's Constitution (2008) mentions that "Ecuador is a constitutional state of rights and justice, social, democratic, sovereign, independent, unitary, intercultural, multinational and secular. It is organized in the form of a republic and governed in a decentralized way" (p. 16). To define Ecuador as a multinational state is to recognize the presence of the thirteen nationalities that interact in this territory: Achuar, A'I Cofán, Huaorani, Kichwa, Secoya, Shiwiar, Shuar, Siona and Zápara in the Amazon; Awá, Chachi, Epera and Tsáchila on the coast; kichwa nationality in the Andean area, composed of various

<sup>&</sup>lt;sup>2</sup> Against all odds, which condemned the Tsáchila to disappearance, the population has increased over the past 30 years. If in 1974 the MAGAP estimated the Tsáchila population to be 915 people, in 1986 it would have increased to 1403 according to Robalino (1989) and the 1995 Pichincha Provincial Council census brings it closer to 2000 people. The figures subsequently change: the INEC data for the 2001 population and housing census state that the Tsachila in Pichincha reach a total of 1426, although according to CODENPE already at that time a minority of 50 people who have migrated to other regions are identified. Always according to the same source, the 2007 census indicates that the total population would have increased again until 1767 and in 2010 it would reach 2568" (Ventura, 2012, p. 44).



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<sup>&</sup>lt;sup>1</sup> Ventura, Montserrat (2012) Anthropologist, researcher of the Tsáchila nationality began in 1991 an ethnography in tsáchila territory (Congoma, Los Naranjos, Chigüilpe, Colorados del Búa and Peripa). After six years of study, she rebuilt the social relationships of this community. She described the place of this group in the Ecuadorian society, its configuration, worldview, shamanism and contribution to the destruction of the myth of acculturated societies.

villages. Each nationality maintains its own languages and cultures and show specific characteristics of their worldview.

Many ethnic groups have had to adapt to live in a different place, this through historical processes in which society has been involved. The Tsáchilas are an example of adaptation: they try to keep their culture and traditions alive despite the strong contact and influence of the mestizos of the province. The territory comprises 9 060 hectares surrendered to the nationality hat comprises seven communes. Ethnic diversity in Ecuador is observed in a culturally rich country: gastronomy, clothing, worldview, language, music, etc. It is the contact between the different ethnic groups that increases this wealth. It is for this reason that –paraphraseing Leiva – (2017) interculturality is defined as communicative exchanges of values, knowledge, codes, worldview between different cultural groups and on an equal footing between individuals.

As a synthesis, it is necessary to recover the main idea of the documents of the Ministry of Education (2012) institution issued by the MABIES, whose mission is to rescue, preserve and develop the language, knowledge and culture of people and indigenous nationalities. In this way, it contributes to the formation of integral human beings, as well as the full defense of their territoriality with the subsequent revaluation of the social and economic organization of their communities, through quality educational processes. In both the education system and the social sphere, equal opportunities, supported by differences such as sex, age, ethnicity, religion, gender, social position, skills, need not be restricted. To do this, it is necessary to understand that the concepts of inclusion and integration do not mean the same thing, although they appear to be some semantic similarity; on the other hand, equity and equality present the same difficulty of definition.

In the case of Santo Domingo de los Tsáchilas, the Ministry of Education (2003) created the Directorate of Intercultural Bilingual Education Tsáchila (DEIBTSA), headquartered in Santo Domingo de los Colorados, with jurisdiction over all community schools of the basic level, high school, post-high school, permanent popular education. This entity is responsible for advising, guiding and monitoring the administrative, financial and technical pedagogical actions of DEIBTSA, which is considered one of the most important achievements of the nationality, within its guidelines in the defense of bilingual education, which should allow them to maintain the fight for the recovery of their ethnic and cultural values.

In the analysis of the application of the interculturality criterion, the schooling processes in Ecuador do not take into account the specific differences of their ethnicity. It does not mean that the laws established since the Constitution and the Organic Law on Bilingual Intercultural Education (LOEIB) do not mention these criteria, but that although they are within the laws, they are not taken into account in everyday life. The new buildings built to strengthen the educational system have been made with the same structure without showing characteristics typical of the culture where they were built. For the United Nations Educational, Scientific and Cultural Organization (UNESCO), in 2005, interculturality is the building of equitable relationships between people, communities, countries and cultures.



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Revista Cátedra, *3*(1), pp. 46-58, January-April 2020. e-ISSN: 2631-2875 DOI: <u>https://doi.org/10.29166/10.29166/catedra.v3i1.1988</u> The implementation of MABIES urgently requires an evaluation, particularly after several years of its implementation, as scholars and experts say that there is a process of cultural dispersion that progresses day by day, the product of the progress of various expressions of the fusion.

The role of the teacher is transcendent in socio-educational and sociocultural development in the educational institutions of the Tsáchila community, in the province of Santo Domingo de los Tsáchilas. Interviews with experts at the Tsacylles BIE conclude that teachers are unaware of methodological strategies and teaching tools related to the education system. Knowledge of Tsafiki culture and language is limited, making it difficult to understand its worldview. An analysis of the role of the BIE in Tsáchilas educational institutions is required in order to feed back their curriculum application to fulfill their purposes. Otherwise, there is a risk of not considering initial efforts to recover and strengthen the cultural identity of ancestral ethnicities, particularly tsáchila nationality. This questioning includes curricular guidelines and concretions for which the teaching staff have not been adequately and comprehensively trained, as well as the role of central, local government and community participation.

### 3. Materials and methods

This research has been developed under the qualitative approach, as it allows the identification of a reality through a research committed to contextualized explanations. The development of this approach is field-type, bibliographic and exploratory documentary with an educational socio-perspective. In the first instance, literature related to Tsáchila nationality as well as topics related to the BIE were revised. The educational phenomena surrounding the BIE in Tsáchilas communities were then described. Finally, the causes and consequences of the implementation of the BIE are analyzed. The educational phenomena surrounding the BIE in Tsáchilas communities were then described. Finally, the causes and consequences of the implementation of the BIE are analyzed. For the collection of primary and secondary information, as well as the description of the variables, student survey techniques have been considered; interviews to teachers who are immersed in the MABIES system and focus group to professionals who know the subject of intercultural bilingual education. The first data collected related to interviews with authors of similar research such as Ramiro Andino or Víctor Hugo Torres have been analyzed and crossed with the theoretical - conceptual definitions of various authors, as well as with the criteria of the researchers. The investigation is still ongoing.

### 4. Results

In interviews with the sources of information of people who know about the subject, as well as from the secondary sources, several statements have been obtained, which correlated with the operationalization of variables, dimensions and indicators, have allowed to build a structured approach, both of the problems and possible alternatives that could be implemented. Among the main results drawn from the interviews are the following:



- The main problem in MABIES is the lack of training in bilingual intercultural education" (R. Andino, personal interview, October 3, 2019).
- Aguavil Andino (2019) state "the low incentive of educational authorities for thirdlevel training or training based on MABIES implies a stalemate or conformism of these teachers in relation to how they teach their classes" (p. 82).
- Aguavil Andino (2019) regarding teacher training considers it to be "a point of reflection, uncertainties and conflicts in any educational system; moreover, in some cases the importance of training and teaching career is rejected by the achievement of the educational and social purposes of educational reforms" (p. 85).
- In bilingual intercultural high school, the dialogue of knowledge, between the components of the Tsáchila worldview and the characteristic elements of the mestiza culture of Ecuador is not achieved. "Tsáchila indigenous cultural identity is undergoing a strong process of decomposition, the result of the relentless and permanent advancement of the mestiza majority" (Torres, Víctor Hugo, personal interview, October 3, 2019).
- According to the partial results of this research, the educational problem has among its main causes the lack of teacher training and third level of the majority of teachers who are even high school teachers. Some of them no longer speak in tsafiki and, consequently, do not contribute to the strengthening of their language and culture through the school system. There are consequences such as the lack of application of new teaching-learning methodologies, the lack of use of teaching resources and innovative resources under a critical socio-vision of their own environment and, among others, the loss of their ancestral language.
- Another element of the ancestral indigenous worldview that has been distorted, has a relationship with territoriality, understood as the consciousness and defense of its territory. Bilingual intercultural education does not develop elements to affirm this Tsáchila territoriality. The same is true of the coupling towards the other cultures, since the Tsáchilas absorb much alienation leaving aside their own identity.
- A fundamental element in the analysis of this educational problem is related to the origin of the class of education, which Bruner (2011) calls the "social genesis of cognitive processes", i.e., the marked differences that exist in the quality education in relation to the class interests of those who run it, the inequities related to social production and the individual appropriation of monopoly group of national wealth.

### 5. Discussion of the results

With regard to the MABIES problem, it is not just about the inclusion of that name which generates cultural inclusion, it is an intercultural system that requires contextualization in the reality, nature of the Tsáchilas, as well as of their ancestral language. It is not enough to just show a few labels and/or graphics with words in Tsáfiki, but to interact and, from there, consolidate the identity and cultural ancestrality of the Tsáchila. The state must be part not only of the definition of the concept of "interculturality", but an actor of its application in all fields of education and communicative interaction.



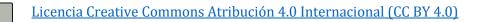
On the other hand, the need to raise the level of professionalism of teachers has several motivations ranging from the recategorization in the teaching salary scale, through the requirement of an interaction of a more qualified teaching learning process. To do this, methodological and didactic resources must be used in order to recover ancestral experiences and knowledge, mainly the mother tongue in both the student with the teacher, as well as between students and teachers. These incentive constraints can, in fact, affect the interest and motivation of teachers who express frustration and disenchantment in implementing their full vocation and quality in job performance, outdoing their project of improvement and teaching professionalization. This fact affects the mission and transformative vision of the teacher, reason for which it is important to start from a first initiative: to value the work of the teacher through the continuous training.

Through the MABIES Integrated Education Learning Guides Implementation Manual (2017) it is determined that teachers at each school must make adjustments, adaptations, or extensions to one or more of the institutional Education Project (PEI) and its curricular elements, such as in "the development of skills and domains in children. In this work, the teacher must correlate the skills and domains with the axes, the areas of development and learning, and the harmonizers of knowledge" (p. 54), in the PCI, in the Cohabitation Code and so on. However, the authorities and teachers of bilingual intercultural educational institutions contribute in a limit way to this purpose, leaving aside the cross-cutting intercultural curricular axes: care of the environment, education for citizens, etc., which should be adapted and contextualized in relation to Tsáchila nationality. This means that the dialogue of knowledge does not materialize in the micro-curriculum of the BIE and, far from strengthening their own culture, the cultural traits of the dominant society are strengthened.

At the moment in bilingual Intercultural Educational Institutions (BIE) there are no teachers speaking Tsáfiki, the problem becomes complex because they fail to develop vocational orientations, mathematical logical reasoning, verbal logic, logical Natural Sciences and Social Sciences contextualized with their ancestrality and their own environment. It turns out that the highlights of the MABIES have been collected from the Quichua nationality. The few texts in Tsáfiki are scarcely used.

One of the results mentioned in the previous paragraph has to do with the distortion of what is considered to be the defense of territoriality. In fact, it has not been understood what the defense means. Hence, the main discussion to be raised by the community and educational control and supervision institutions from the Ministry and from the MABIES system, is in relation to the question, how to strengthen the cultural and bilingual identity from the BIE derived from their ancestrality, territoriality, knowledge, identity, etc., elements that, if no policies and implementation are implemented, will fail in the formulation of policies – in theory – and, with few and limited results of implementation– in practice.

As for the origin of class in education, it is important to emphasize that, to the extent that people have higher economic incomes and material facilities, their children are most likely to reach a higher degree of schooling. It is a vicious cycle, because in most cases, people with



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lower income and access to school resources cannot access a high level of schooling. There, BIE actors by generating a limited quality of professional performance generate an educational process that leaves no options for greater competitiveness and access to higher education and skilled job choices for students from indigenous nationalities.

### 6. Conclusions

There is a process of cultural dispersion of the ancestral knowledge of the Tsáchila nationality and, the learning teaching process that has been developed in bilingual intercultural education fails to contain the advancement of the fusion and the cultural dispersion. One consequence that follows from this fact is that the teaching-learning process is ineffective and the knowledge imparted is not consistent with the needs of tsáchilas communities.

One of the strategies that are being presented and that this research promotes for the recovery of ancestral values and knowledge is the formation and functioning of the so-called Cultural Centers. They are spaces from which the expressions of the ancestrality, territoriality, language and customs of the Tsáchila nationality are practiced. With intercultural community tourism, they need to be taken into account within the BIE's methodological strategies, so that significant results are achieved in the bilingual intercultural teaching learning process.

The need for improvements in academic training and ongoing training for teachers who perform their professional work in the bilingual intercultural education system is imperative. The academic offer of higher education institutions must be adapted to this need. Relevance, understood as the university's response to the solution of expressions of society's problem, bilingual intercultural training options should be updated and incorporated. This incorporation must not be done from an indigenous vision, but from a holistic and integral vision that takes into account vocational teacher training with the didactic recovery of the knowledge of tsáchilas ancestrality.

Ethnic-racial, class, gender, among other forms of social exclusion, make students who receive limited education face cultural ruptures and fail to express levels of academic development (domains, skills), causing school performance slows down. Consequently, the influence of mixed culture is growing, which becomes the strengthening of processes of cultural syncretism of the Tsáchilas.

Better and greater support for the research of Ppedagogical, didactic and curricular processes of the BIE, as well as the production of curricular texts, continuous training and teaching professionalization, would be the alternatives to address this problem. The first thing is to continue with the discussion and open it to all analysis edges.

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# Estrategias lúdicas en el aprendizaje de la nomenclatura química inorgánica

# Playful strategies in the learning of inorganic chemical nomenclature

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### Resumen

La implementación de nuevas estrategias y metodologías dentro del proceso de enseñanzaaprendizaje en la educación universitaria surge de la necesidad de dar respuesta a las dificultades que se hallan avocados los estudiantes en su quehacer académico. En este



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contexto, en la Carrera de Pedagogía de las Ciencias Experimentales, Química y Biología de la Universidad Central del Ecuador, como unidad académica directamente relacionada en la formación de los nuevos docentes en el área de Química se planteó como objetivo evaluar la incidencia de las estrategias lúdicas en el aprendizaje de la nomenclatura inorgánica. Así, se desarrolló una investigación cuantitativa cuasi experimental aplicada a dos grupos de estudiantes de primer semestre, Grupo Control y Experimental al que se le aplicaron las estrategias lúdicas para el aprendizaje. Se abordaron tres ejes temáticos -Símbolos químicos y valencias; función óxidos: básicos, ácidos, neutros y compuestos y funciones hidróxidos, hidruros y ácidos hidrácidos- y para su valoración se aplicaron cinco evaluaciones, una diagnóstica, una al finalizar cada tema y una sumativa al finalizar la unidad. Para el análisis de resultados se trabajó con el 5% de error. Se aplicaron dos pruebas t de Student que determina la diferencia significativa entre las medias de dos grupos, y Kolmogorov-Smirnov, para distribución de la población, todo procesado con el paquete estadístico SPSS. Kolmogorov mostró que la distribución es normal y la prueba t, que existe diferencia significativa entre los grupos control y experimental en tanto que para las evaluaciones dos y tres, no evidenció diferencia significativa.

### Palabras clave

Estrategias lúdicas, nomenclatura química inorgánica, enseñanza-aprendizaje, juego

### Abstract

The implementation of new strategies and methodologies in the teaching-learning process in university education arises from the need to respond to the difficulties that students have in their academic work. In this context, in the Career of Pedagogy of Experimental Sciences, Chemistry and Biology of the Central University of Ecuador, in the area of Chemistry was set as an objective to assess the impact of playful strategies on learning inorganic nomenclature. Thus, a quasi-experimental quantitative research applied to two groups of first-semester students, Control and Experimental groups, was used. Three thematic axes were addressed - Chemical symbols and valences; oxides function: acids, neutrals and compounds and hydroxides, hydrides and acids- and five evaluations were applied for titration, one diagnostic, one at the end of each topic and one summative at the end of the unit. 5% of error was considered for the analysis of the results. Two Student t-tests were applied which determined the significant difference between the means of two groups, and Kolmogorov-Smirnov was employed for the population distribution, all processed with the SPSS statistical package. Kolmogorov showed that the distribution is normal, and the t-test indicated that there is significant difference between the control and experimental groups as for evaluations two and three, it did not show significant difference.

### Keywords

Teaching, learning, play, nomenclature, chamical.

### 1. Introduction

The incorporation of playful activities in the educational field improves the teachinglearning process. In addition, it facilitates the understanding of complex themes. Inorganic chemical nomenclature is one of the content that creates more difficulty for students who start studying Chemistry, problem that persists at the level of higher education and that is observed in the Career of Pedagogy of experimental sciences of Chemistry and Biology of the Central University of Ecuador. This problem becomes more important as it is a career



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Revista Cátedra, *3*(1), pp. 59-72, January-April 2020. e-ISSN:2631-2875 DOI: <u>https://doi.org/10.29166/10.29166/catedra.v3i1.1966</u> related to teacher training. For this reason, the objective of this study was to evaluate the impact of playful strategies on the teaching-learning process of inorganic nomenclature.

In the face of the negative attitude that students adopt when developing content related to inorganic chemical nomenclature, it is important to incorporate active methodological strategies that promote a change of attitude and allow to address the contents in a participatory way. Playful strategies are a viable alternative to motivate the study of inorganic functions.

Incorporating games into classroom activities provides significant benefits. The game in the teaching-learning process arouses interest. This is manifested by Chacón (2008), "playful activity is engaging and motivating, capturing students' attention to the subject or for any area that wants to be studied" (p. 33). The game makes the student interested in topics considered "difficult", becoming an interesting strategy for the hard science teacher. Another significant benefit of playful strategies is skill development. The ability to solve problems, creativity, decision making, assertive communication, among other cognitive skills are enhanced by the typical dynamics of the game. Another important aspect developed through the game is social skills. Playful strategies strengthen the cooperative work. According to Martinez et al. (2011), the synergy between playful activities and cooperative learning enables "the interaction between peers, the acceptance of norms and the discussion of ideas, the recognition of the successes of others and the understanding of mistakes" (p. 403). There is no doubt that the interaction generated through the game consolidates learning, improves self-esteem and promotes respect for others. Therefore, the benefits of playful strategies are significant, it is worth incorporating the teacher's practice.

In this context, this article describes the main problems associated with learning inorganic chemical nomenclature, the benefits of using games into in the teaching-learning process, and studies related to playful activities in different levels of school training. The materials and methods used in the research are presented as well as the results set out in this article derive from the experience of incorporating playful strategies into the teaching-learning of inorganic chemical nomenclature in first semester students.

### 1.1 Difficulties in the learning process of inorganic chemical nomenclature

Learning goes beyond the mere retention of information, it implies that the individual is able to process it, locate it under a specific context and provide a practical sense to it; as stated by Rivera (2004), " the process by which the significant personal representations that have a sense of an object, situation, or representation of reality is known as learning" (p. 47). Therefore, learning comprises cognitive processes that allow the tangible to be linked to the intangible. However, this fact may be a challenge in learning chemistry. Nakamatsu (2012) mentions that "learning chemistry is further complicated, as it requires working at the macroscopic level (physical world) and at the sub-microscopic level (atoms and molecules), and using a system of symbolic representations (formulas, equations, etc.) and a new language" (p. 44). One of the conceptual contents of inorganic chemistry is the chemical nomenclature. The study of this topic has represented in some students some suspicion when developing it. According to some authors, among the reasons that studying chemical nomenclature raises doubts in its learning are: the conception of difficult understanding of the subject, the application of an inadequate teaching methodology and memorization as the basis of their learning.

With regard to the conception of inorganic chemical nomenclature as a subject of difficult understanding, in the study "ICT in the teaching of the Chemistry of the training cycle for the first, second and third semesters of the Pedagogy of Experimental Sciences, Chemistry



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and Biology..." Cedeño (2019), corroborated the complexity of the aforementioned topic. This research surveyed students of basic training levels on conceptual topics that represent more difficulty in their learning within the subjects of General Chemistry I, General Chemistry II and Inorganic Chemistry for the first, second and third semesters, respectively. Based on the results, the author notes that one of the most complex topic for students is inorganic chemical functions. This is noted by Cedeño (2019) "... there is greater difficulty in unit four of the subject of General Chemistry I, whose name is Chemical Links and Introduction to the Inorganic Chemistry Nomenclature..." (p. 86).

Of the topics addressed within the aforementioned unit (chemical links, generalities and inorganic chemical functions), both the generalities of the nomenclature and the main chemical functions represent greater difficulty in understanding it for 25% and 30% of the students. The percentages indicated, although they do not exceed 50% of students with a similar criterion, correspond to those of higher rank, since the units that are not related to chemical nomenclature do not exceed 10%. It is clear that the study of inorganic chemical functions represents a real challenge for a significant percentage of students when reviewing them.

The methodology of teaching chemical nomenclature is another aspect that can hinder the learning of the nomenclature. Teachers in this field are usually part of a spontaneous teacher model and professionals base their teaching methodology on traditional techniques. There is an unsuitable way to develop this topic by the initial teachers. Among the mistakes made according to Fernandez (2013) are:

... the number of different concepts taught simultaneously. The student is surrounded by a conjunction of all of them making him/her impossible to assimilate them", "The disciplinary profile is reinforced by the classification quest, which ends up introducing compounds such as metal hydrides, at equal deal with oxides or salts...

The belief in the primary role of the periodic table in formulating is very common. It is true that, among other things, it can facilitate the retention of valences/nox and the assimilation of the types of compounds, according to the different groups, but at the cost of a deeper memoristic effort...

As for the procedure used to formulate, the 'exchange' rules and 'divisibility' lead to inconsiderable inconveniences. As taught, they appear before the student as arithmetic rules that are applied mechanically, without showing their chemical foundation. (p. 684-685).

The teaching under the spontaneous model affects teachers in training, and it is a significant fact that they tend to keep their professional practice based on their academic experience. Hence, there is a tendency to replicate the methods, techniques and activities that their teachers used with them during their training process.

The predominance of the traditional teaching model in the subject of Chemistry is translated into a learning based only on the reproduction of the contents taught by the teacher, favoring the student's memorization, a situation that does not correspond to what was established by David Ausubel's Theory of Significant Learning proposed in 1963, who conceives the student as an active processor of information, because,



he/she transforms and structures it, creating a significant, nonmemoristic learning (p. 12).

In the case of teaching chemical nomenclature, the use of memorization as the main learning strategy is even more frequent. Students' mastery of conceptual content such as symbols, valences and chemical formulas is often an essential requirement. This teaching conception is limited, because while chemical symbols, valence numbers and other conceptual elements require a degree of memorization, this process must be accompanied mainly by the understanding of them and not of the simple repetition.

On the other hand, the use of inadequate bibliographic resources promotes the repetition of content. According to Níaz (2005):

... many authors try to present the tentative as definitive, without explaining how certain conclusions were reached under certain premises, interpretations and evidence. Thus, instead of convincing the student with arguments, the texts simply present them with the opinion of some scientific authority, to conclude: 'Everyone thinks this is the truth.' Faced with this disjunction, students have few alternatives and generally end up memorizing the content (p. 411).

While teaching resources play a significant role in the teaching-learning process, careful selection of them is necessary. Chemical nomenclature texts are useful tools for teaching as long as they do not merely present chemical formulas as a simple result of compound formation. It is necessary to use texts that contemplate the explanation of the compound formation as a result of the characteristics of the chemical elements as well as their behavior.

Under no conception should content be prioritized over the intellectual learning processes of students. Prioritizing concepts leads to making mistakes for chemistry teachers both in the execution of classroom activities and in the use of teaching resources. These errors, in turn, lead to the lowest level of learning such as memorization.

## 1.2 Benefit of the implementation of playful strategies in the teaching-learning process

Playing is an inherent activity to the human being, since from an early age the game is part of the physical, cognitive and emotional development of the individual; and in the early years of schooling, it is an essential part of academic activities. Hence, why not incorporate playful strategies in High School and higher education? Some of the benefits of playful strategies in the teaching-learning process applicable to different levels of training will be discussed below.

One of the most notorious and forceful benefits of incorporating the game into school activities is undoubtedly motivation. This is stated by Montero (2017), "playful methodology helps to learn a subject by encouraging the motivation to continue this educational process..." (p. 76). It is certainly imperative to arouse interest in themes that would otherwise be monotonous or boring if traditional methodologies are applied as a single resource. The game incorporated into the educational process can get the attention and can change the dynamics of the class by making it more active. The incorporation of other elements such as ICT can be an effective methodology for young students and adults.



Developing skills is another important benefit of incorporating playful activities into the teaching-learning process. There are so many skills developed through the game based on the area of development as depicted in Figure 1. Thus, in the physical-biological area the game allows body expression, enhances the speed of response to stimuli as well as refines manual abilities and coordination (Chacón, 2008). While it is true that the benefits of games in this area are outstanding in the first years of human life, in young people and adults it allows to maintain and even strengthen their physical development.

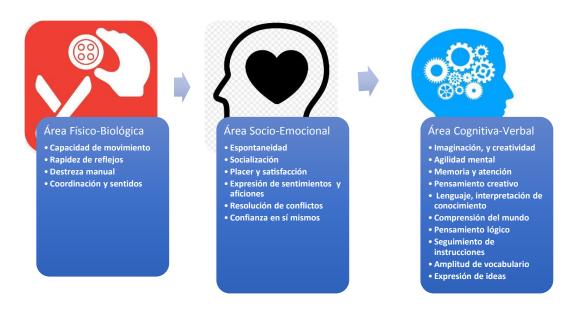


Figure 1. Benefits of playful strategies by areas in the human being. Source: (Chacón, 2008, p. 34)

Another important area in which the game contributes significantly is the socio-emotional area. The human being is by nature a social being, he/she needs positive interaction with other individuals. The game allows to improve the relationship between teachers and students and even strengthens self-confidence. This fact is relevant in shy students whose participation through a traditional methodology is limited or zero. This is manifested by the team "Elige Educar" (2014) "the most introverted students often feel threatened when they are required to participate by answering a question or solving an exercise in front of the rest of their peers, resulting in an emotional blockage and the consequent loss in their potential to learning..." (p.1). Playful strategies facilitate the integration of all students and therefore improve the social skills of introverted students, as the game improves assertive communication and raises their self-esteem.

Playful activities also allow to develop the cognitive-verbal area of individuals. The cognitive skills that stand out when employing playful strategies are imagination, creativity and logical thinking. The game represents a challenge that participants must overcome, for this they must overcome difficulties or problems in which mental agility is required, must know how to follow instructions, join ideas and express them with collaborative work. Oliva (2016) states that the game is more than a "simple entertaining and fun methodology, due to its integrative dynamics of knowledge; gamification becomes a training resource used to access the intellectual organization of the individual, thus determining cognitive functioning in certain mechanisms of how the student learns..." (p. 44). Therefore, playful strategies allow to enhance the cognitive skills of the student, facilitating a significant learning since,

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() BY thanks to the dynamics of the game, the student focuses his/her attention on it, leaving aside the stress and monotony that would have a traditional class.

### 1.3 Related studies

In the teaching-learning process, playful strategies have been applied at different educational levels. In the literature can be observed works in Latin American countries such as Mexico, Cuba, Colombia and Argentina, where education has been strengthened with the implementation of recreational strategies in High School and higher education. These experiences demonstrate positive results without the student's age being limited. The works described below provide a more objective view of what is stated.

In 2014 in Guadalajara Jalisco, Mexico, the article Didactic Strategies in Teaching-Learning: Playful strategies in Learning the Organic Chemical Nomenclature in students of the Atonilco Regional High School was published, where the experience of the use of games as a strategy for the teaching-learning process is presented, with the topic Functional groups corresponding to Chemistry II of the General Baccalaureate for Skills. The authors say that it is very important to use game-based learning as a teaching-learning strategy, as it allows students to understand what they have learned (Zaragoza et al., 2016 p. 5).

During the years 2014-2014 in Cuba, the work didactic strategy based on playful activities for the learning of chemistry in High School was published, in which the authors show that didactic games were designed for the teaching of chemistry whose results in the experimental group showed higher score averages than those of the non-experimental course, and mentioned that there is acceptance of the games by the students and that playful work enables the development of cooperative work and the increase of the significant learning of students (Plutin-Pacheco and García-López, 2016, p. 623).

In 2018 in Bogota, Colombia, the study Inorganic Nomenclature: a playful proposal for the teaching of chemistry developed with tenth graders, was aimed at developing a playful tool in the tenth course of Elementary school in order to show the impact of the game on the learning process. It notes that, among other aspects, this strategy helps to achieve a better appropriation of traditional inorganic nomenclature and its relationship to the management of the chemical formula, it also affects the strengthening of teamwork and the establishment of a path between the construction and reconstruction of conceptual and methodological structures (García, 2018, p. 45).

In 2007 in Cundinamarca, Colombia was published a research entitled Communicative skills, teaching and learning of natural sciences: a playful approach, where the author determined that the game as a recreational exercise gives students the ability to develop communication skills and build knowledge. The author also mentioned that the game helps strengthen healthy academic competence and increases self-esteem under which students feel that they help effectively build true learning. On the other hand, it is mentioned that the playful strategy stimulates an adequate management of conceptual information and scientific language, elements that can be built, developed and expressed in a group context of continuous communication (Palacino, 2007, p. 295).

Similarly, in 1996 in Argentina, in the article How to promote the learning of inorganic chemical formulation with non-conventional strategies, the results of a study based on the adaptation of a game for learning chemistry are published. In this regard, the authors note that "non-conventional strategies, such as appropriately designed playful activities (games), constitute a valuable resource that can be leveraged as an alternative to get the student actively involved in the teaching-learning process " (p. 79). As a result of this study, it is disclosed that the use of the recreational activities allowed the study group to share



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Revista Cátedra, *3*(1), pp. 59-72, January-April 2020. e-ISSN: 2631-2875 DOI: <u>https://doi.org/10.29166/10.29166/catedra.v3i1.1966</u> interests, concerns, and responsibilities, favoring the assimilation of knowledge and its production (Pandiela, Nuñez, and Macías, 1996, p. 84).

### 2. Materials and methods

The research is quantitative and quasi-experimental. It was held in the Career of Pedagogy of Experimental Sciences, Chemistry and Biology of the Central University of Ecuador. The population consisted of first-semester students, corresponding to 35 students from the B-parallel (control group) and 43 students from the C-parallel (experimental group) to which playful strategies for nomenclature learning were applied. The following hypotheses were raised:

 $H_{0}$ : Playful strategies do not have a significant impact on academic performance related to inorganic chemical nomenclature.

 $H_1$ : Playful strategies have a significant impact on the academic performance related to inorganic chemical nomenclature.

The selection of the parallels was based on the similarity of conditions: evening study, teacher and number of students. The recreational activities were applied as strategies to reinforce the contents of unit IV corresponding to the bases of inorganic chemical nomenclature. The contents were developed in three stages:

- Chemical symbols and valences
- Function oxides; basic, acidic, neutral and compounds
- Hydroxides, hydrides and acids

At the conclusion of each stage, group games were applied on the basis of competence dynamics and using online questionnaires. 5 evaluations were carried out; the first corresponding to the pre-test (diagnostic test), three evaluations related to each of the stages and a final evaluation corresponding to the post test (unit test).

### 3. Results and discussion

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Based on the results obtained with the application of the pre-test, parallel C was selected as an experimental group and the parallel C as the control group. Parallel B obtained a  $\bar{x}$  of 8.70 and parallel C a  $\bar{x}$  of 7.03. Having parallel C the lowest mean, it was intended to verify the impact of recreational strategies on the academic performance.

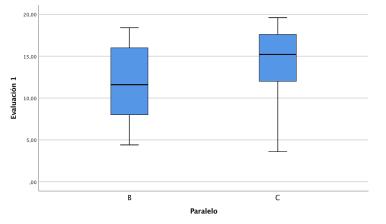


Figure 2. Box plot and whiskers with x = 12.09 parallel B, and x = 13.91 parallel C in the evaluation 1.

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Revista Cátedra, *3*(1), pp. 59-72, January-April 2020. e-ISSN:2631-2875 DOI: <u>https://doi.org/10.29166/10.29166/catedra.v3i1.1966</u> Once the Kolmogorov-Smirnov normality test was applied, the t-test was performed for independent samples, matching variances were assumed for each of the three evaluations. The bilateral significance value for evaluation 1 is 0.037. Based on this value being less than 0.05, it is inferred that there is a significant difference between the scores obtained in evaluation 1 of the control and experimental groups, whose mean difference is shown in Figure 2, control group (11.79) and experimental group (14.20).

With respect to the statistical results of evaluations 2 and 3, the value of bilateral significance is 0.10 and 0.45, respectively. These values exceed 0.05, consequently it is deduced that there is no significant difference between the performance of the control and the experimental group. Although these differences are not statistically significant, the experimental group shows a better performance (See Figure 1). This diversity of the results is consistent with the academic performance variable, since it is multifactorial in nature as stated by Garbanzo (2007):

Since the academic performance is multi-causal, it relates a huge explanatory capacity to the different factors and temporal spaces involved in the learning process. There are different aspects that are associated with the academic performance, including internal and external components to the individual, which can be social, cognitive, and emotional (p. 47).

The factors that may have affected academic performance related to the results of evaluations 2 and 3 are linked to the initial familiarization of the nomenclature standards, the persistence of prejudice over the degree of difficulty along with problems in the family and social environment that each student may face.

Evaluation	Control group	Experimental group
	Ā	x
E. 1	11.79	14.20
E. 2	12.09	13.91
E. 3	13.28	14.04

Table 1. Means of the evaluation of the experimental and control groups

In order to verify whether playful activities contributed to improving the performance conditions of the experimental group, the correlational t-test was applied once normality was verified through the Kolmogorov-Smirnov test. The results can be observed in Table 2. The value of bilateral significance obtained was 0.00 and since this value is lower than 0.05 it is shown that there is a significant difference between the pre-test and the post-test, i.e., it has gone from a score of 7.03 in the initial test to a score of 14.51 in the final test. When comparing the calculated t values (2,704) with tabular t (-14,202) as shown in Figure 3, the calculated t-value falls outside the acceptance zone of the null hypothesis, therefore  $H_0$  is rejected and  $H_1$  is accepted, i.e., play strategies do affect significantly in the academic performance related to inorganic chemical nomenclature.

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Test of paired samples Paired differences									
95% of con interval o Desv. Desv. differen Mea Desviati Average n on error Inferior S						l of the	t	g l	Sig. (bilater al)
Pa Diagnose r 1 evaluation evaluation 4(Unit test)	-	- 7.70 615	3.38865	0.54262	-8.80463	-6.60768	- 14. 202	3 8	0,.000

Table 2. Test of paired sampled of parallel C

Note: A significance of 0.000 is observed, indicating a significant difference in the beginning of the course and its completion in terms of the parallel C.

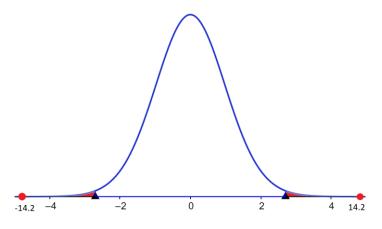


Figure 3. Hypothesis test

In order to verify whether playful activities contributed to improving the performance conditions of the experimental group, the correlational t-test was applied once normality was verified through the Kolmogorov-Smirnov test. The results of this can be observed in Table 2. The value of bilateral significance obtained was 0.00, and since this value is less than 0.05 it is shown that there is a significant difference between the pre-test and posttest, i.e., it has gone from a score of 7.03 in the initial test to a score of 14.51 in the final test. When comparing the calculated t values (2,704) with tabular t (-14,202) as shown in Figure 3, the calculated t-value is outside the acceptance zone of the null hypothesis, therefore  $H_0$  is rejected and  $H_1$  is accepted, i.e., playful strategies affect significantly the academic performance related to inorganic chemical nomenclature.

It is worth noting that applying the correlational t-test to the control group also shows improvement in the academic performance. This difference is not as marked as in the experimental group, as the control group increased by an average of 4.51 points while the experimental group increased by 7.48 points.

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The result obtained between the pre-test and post-test of the experimental group is consistent with the results of similar studies that applied playful methodologies as well as Garza (2014), when implementing bingo as a methodological strategy, obtaining a value of bilateral significance lower than 0.05 (p = 0.001), and in the same way Da Silva et al. (2018), when applying the interactive game Say My Name reached a bilateral significance value lower than 0.05 (p = 0.0001). In both cases, a significant difference is demonstrated, i.e., the experimental group performed better than the control group.

It is important to note that in this research the experimental group started under conditions of lower performance (x = 7.03) compared to that of the control group (x = 8.70), and yet in the post test the experimental group exceeded the mean of the control group. This is consistent with Garza's experience (2014), demonstrating that playful strategies can improve the group performance even under adverse initial conditions.

In addition to the positive quantitative results, several aspects related to the attitude and behavior of students during the development of recreational activities should be mentioned. For example, a better willingness was observed during class, dynamism, companionship, joy, participation, which can be summed up in a motivational word. In the face of strategies other than those normally employed in inorganic chemical nomenclature classes, not only improved student performance was obtained, but a relaxation attitude was achieved, which is much more beneficial for learning than the fear that the students from previous semesters experienced while studying chemical nomenclature.

### 4. Conclusions

 $H_{\theta}$  is rejected and  $H_1H1$  is accepted, which expressed: The incorporation of playful strategies into the teaching-learning process of the chemical inorganic nomenclature allows to improve the academic performance. This is demonstrated by the results of evaluation 1 when applying the student t-test for independent groups as well as the results of the correlational t-test application. The difference between academic performance means in assessments 2 and 3 without being statistically significant denotes better performance in the experimental group.

This experience of the application of playful activities can be projected to other topics that also pose a challenge for students. Themes such as, periodic properties, electronic configuration and chemical quantities can be developed through playful strategies. The results obtained in this research could be improved with the incorporation of ICTs into playful strategies.

Playful teaching strategy is a positive experience even in adults as it generates a proactive environment, promotes creativity, teamwork and improves the willingness towards topics such as inorganic chemical nomenclature which is considered tedious. Therefore, this strategy should be incorporated into educational practice in higher education institutions as age is not a limit to developing learning processes through playful activities.



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# Percepciones a una educación inclusiva en el Ecuador

## Perceptions of inclusive education in Ecuador

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### Resumen

El presente artículo tiene como finalidad realizar el análisis de la política de inclusión educativa en el Ecuador y su relación con el accionar pedagógico vigente en los escenarios educativos. Los sistemas educativos del estado ecuatoriano a pesar de estar alineados a parámetros internacionales de inclusión, no ha superado la brecha de discriminación a las personas con necesidades educativas especiales (NEE). El presente documento aporta principalmente a la innovación en el pensamiento pedagógico de los docentes, para ello, parte del informe de Warnock (documento que fue elaborado por la Comisión de Educación británica) el mismo que revoluciona en la forma de pensar de todos cuando revela que "no existen niños ineducables" (Warnock, 1987, p. 15). La metodología utilizada en la estructuración de este trabajo es de carácter inductiva – deductiva y se apoya en la investigación bibliográfica. Los resultados del presente estudio revelan falencias y dificultades en la inclusión educativa de estudiantes con NEE, los problemas más relevantes que se observaron fueron las deficiencias conceptuales en torno a inclusión educativa, escaso conocimiento sobre un currículo inclusivo y debilidades en una supuesta homogeneidad en el aula. Este documento presenta brevemente algunas perspectivas y



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Revista Cátedra, *3*(1), pp. 73-90, Juanary-April 2020. e-ISSN: 2631-2875 DOI: <u>https://doi.org/10.29166/10.29166/catedra.v3i1.1903</u> desafíos para promover un pensamiento inclusivo pero, sobre todo, abierto a la diversidad.

## Palabras clave

Docencia, innovación, inclusión, pedagogía, práctica.

## Abstract

The purpose of this article is to carry out the analysis of the policy of educational inclusion in Ecuador and its relationship with the pedagogical action in force in the educational scenarios. The educational systems of the Ecuadorian state, despite being aligned to international parameters of inclusion, have not overcome the gap of discrimination against people with special educational needs (SEN). This document mainly contributes to innovation in the pedagogical thinking of teachers, for this purpose, part of the Warnock report was used (a document prepared by the British Education Commission) the same one that revolutionizes the way everyone thinks when revealing that "there are no uneducated children" (Warnock, 1987, p. 15). The methodology used in the structuring of this work is inductive – deductive in nature and is supported by bibliographic research. The results of this study reveal gaps and difficulties in the educational inclusion of students with SEN, the most relevant problems that were observed were the conceptual deficiencies around educational inclusion, little knowledge about an inclusive curriculum. This paper briefly presents some perspectives and challenges to promote inclusive thinking, but above all, to open to diversity.

## Keywords

Teaching, innovation, inclusion, pedagogy, practice.

## 1. Introduction

This document aims to innovate the thinking of the teacher regarding the inclusion of people with special educational needs (SEN) in the teaching-learning process, since the teachers are the responsible for the formation of new generations. For this purpose, the documentary analysis of the contributions of both international and national bodies has been carried out. The analysis identified deficiencies in inclusive action. The problem is mainly seen in the cognitive and procedural weaknesses of teachers during educational inclusion processes.

To understand the context of study, as a starting point, the analysis of the contributions of the United Nations Educational, Scientific and Cultural Organization (UNESCO) has been carried out, being the first to declare human rights globally, followed by the world conference on people with SEN, the latter focused on avoiding discrimination and linking the international commission on education for the 20th century and within the framework of the Dakar conference, giving an approach to education for all, becoming these the collective commitment of countries, which have "an obligation to ensure that the objectives and purposes of Education for all are achieved and supported" (UNESCO, 2000, p. 38), postulates that have currently been part of the 2030 agenda and of the sustainable development goals in Ecuador

At the national level, it has been identified the role of the current governments. In Ecuador since 2007, educational inclusion is part of a public policy that originates from constitutional declarations, reaching a level of concreteness through legal guidelines such



as: Organic Law on Disabilities (LODDIS), Organic Law on Intercultural Education (LOEI), being the Ministry of Education (MINEDUC) the governing body in education.

It is important to note that the idea of including people with SEN in the educational field was thought in the Integrative School at the end of the twentieth century. The first step towards inclusion is non-discrimination and the pursuit of equal rights for people with disabilities (PwD). The second step in its view is the Warnock report published in 1978 in England in which the term SEN is introduced for the first time, which referred to students who require support during their schooling, whether or not they have some kind of disability, thus breaking the paradigmatic scheme of the time, because it was thought that there could only study healthy people.

Hence, several international institutions such as UNESCO established policies of inclusion and coexistence of a structural nature. In order to meet this milestone, the higher education system in Ecuador seeks a transformation oriented to the access, permanence and qualification of students who require comprehensive attention.

The role of the teacher during pedagogical practice is important, so it seeks to make the educational inclusion of children, young people and adults effective, by promoting "learning in society underpinned by the axis of action of learning to live together" (UNESCO, 1998, p. 34), without any risk of exclusion regardless of personal, physical, sensory, economic, social or cultural condition.

Educational practice invites the generation of creative and innovative actions with a strong scientific knowledge about SEN to more related topics such as: methodologies, strategies that allow the formulation of curricular adaptations that respond to the difficulties of each student.

The problem, according to the United Nations (UN), is not to make substantive changes to pedagogical practice. Some of these problems could be improved by homogenizing education, opening its doors to students with SEN in order to avoid discrimination, or simply by giving way to a human and constitutional right. However, one of the weaknesses of teachers is not knowing how to face diversity in the classroom from a cognitive, technical and attitudinal approach. Limiting aspects that do not allow to break an identical barrier of thought and generate advanced procedures that seek to innovate people with individual differences (ONU, 1982, 17).

In this sense, educational institutions have failed to consolidate the concept of inclusive education in its entirety. Even though UNESCO collaborates with "governments against inequalities and exclusion" (UNESCO, 1960, P.1). Similarly, states have established policies and guidelines for marginalized and vulnerable groups. In particular, students with disabilities, being in a majority number in the child population who do not attend school. This has driven the need to innovate pedagogical practice from a structural change of thinking and attitude to true educational inclusion.

This document is structured in four parts. The first part takes a retrospective view on inclusive education, addresses its origin and evolution to the present day, this is done through the guidelines of international organizations such as UNESCO. The second part describes the real picture of educational inclusion in Ecuador, identifying itself as a universal right embodied since the Constitution and all legal support. This section addresses the strategic actions carried out by MINEDUC, such as programs and projects that are operated by teachers for the generation of inclusive schools. The third part refers



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Revista Cátedra, *3*(1), pp. 73-90, January-April 2020. e-ISSN: 2631-2875 DOI: <u>https://doi.org/10.29166/10.29166/catedra.v3i1.1903</u> to innovation from a conceptual approach, in which it is defined as the ability to generate new things. In addition, the analysis of educational innovation is carried out as a new paradigm evidenced by the pedagogical practice of teachers in the classrooms. Finally, the fourth part addresses the main premises obtained after the documentary analysis and formulated as conclusions.

## 2. Retrospective visión about inclusive education

Assisting people with SEN in educational institutions became a pedagogical need. The moment when the teacher needs to give effective and quality attention to each of them, at all levels of teaching. Therefore, it is not a recent activity, and furthermore, it becomes a constitutional mandate when the states establish it as a right like in Ecuador (Asamblea Nacional Ecuador, 2008).

Educational inclusion, as a pedagogical need that addresses the individual differences of students at any level of study, is not a recent topic. This arises in considering education as a compulsory right of all people in the world, implicitly those with SEN. It was proclaimed as a universal right in the Declaration of Human Rights on 10 December 1948 in Paris, at the United Nations General Assembly, being considered "(...) the full development of the human personality and the strengthening of respect for dignity (UNESCO, 1948, p. 8).

The Declaration cited as generalizing does not refer to educational inclusion as a means of enforcing universal rights, and does not cover gender diversity or SEN particularities. On the contrary, "it serves the integrality of the human being in the search for the strengthening of his/her capacities with respect and dignity" (UNESCO, 1948, p. 10). This characteristic created inclusive education as an essential need.

Hence, twelve years later, in 1960 in Paris, UNESCO generates an important normative instrument in the field of education, as a specific reference, this being the Convention on combating discrimination in the field of education, in order to commit Governments to "formulate, develop and implement a national policy aimed at promoting, by appropriate methods to national circumstances and practices, equal opportunities and treatment in the field of education (...)" (UNESCO, 1960, p. 2).

This regulation broadly covers the right to education and has a binding force with international laws. In respect of diversity, they outlaw all discrimination in order to promote the educational inclusion processes of people with SEN, by mentioning in article 3 the commitment of the intervening States, in:

Repeal all legislative and administrative provisions and abandon all administrative practices involving discrimination in the field of education;

Adopt the necessary measures, including legislative provisions, so that no discrimination is made in the admission of students to educative institutions (UNESCO, 1960, p. 2).

This breakdown of thought is supported by the Warnock report, based on diversity, with individualized and comprehensive attention being proposed for students with SEN. From this, special education has been seen from a different angle, and as a complementary means to provide care for students with severe or profound disabilities, difficult to be assisted in regular education. Therefore, "special schools must continue to exist to educate children with severe and complex disabilities" (Warnock, 1987, pp. 45-73).



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Revista Cátedra, *3*(1), pp. 73-90, January-April 2020. e-ISSN:2631-2875 DOI: <u>https://doi.org/10.29166/10.29166/catedra.v3i1.1903</u> Since the Warnock Report, important actions have been carried out such as: the world conference on SEN in Salamanca in 1994, affirming the "Principle of Education for all and examining the practice to ensure that children and young people with Sen's education are included in all these initiatives and can take their right place in a learning society" (UNESCO, 1994, p. 3), from the concept of universality, non-discriminatory, inalienable, inclusive, respecting gender, disability, ethnicity, or economic vulnerability.

At the above-mentioned conference, UNESCO establishes as its main agreement with States the policy of teacher training, in response to the "need and urgency to provide education to all children, young people and adults with SEN in the same education system" (UNESCO, 1994. P. 48), a commitment joined by more than 300 participants, representing 92 States and 25 International organizations.

The 22 articles enacted in the Uniform Rules on Equal Opportunities for PWD, published in 1982 by the United Nations (UN) aimed to highlight the "need to address disability from a human rights perspective" (UN, 1982, p. 2), with the intention of breaking down paradigmatic barriers of exclusion and promoting inclusion, by enacting international guidelines with moral and political commitment of States to adopt equal opportunities measures in various fields.

The uniform rules determine the obligation of States to establish generalized policies, hence in Article 6 is established the need to:

(...) recognize the principle of equal opportunities for education at the elementary and higher levels for children, youth and adults with disabilities in integrated settings, and guarantee that education of people with disabilities be an integral part of the education system (UN, 1982, p. 16).

Similarly, in the year 2000 in Dakar – Senegal took place the global declaration on education for all, with the intention of providing special attention in six areas, including: girls' and women's education and crisis education in the framework of action; becoming these the collective obligation of nations to "ensure that the objectives and purposes of Education for all are achieved and supported" (UNESCO, 2000, p. 38).

The fifth commitment of this forum was Inclusive Education, which "involves guaranteeing access and permanence, the quality of learning and full participation and integration (...)" (UNESCO, 2000, p. 39), allowing access to the education system for girls, children, adolescents, adults whatever their status. This group considered differences in gender, ethnicity, disability, economic status, people with diseases and in abandonment conditions, generating a special educational need.

Part of the above commitment is "non-discrimination on the basis (...) of gender; it is an essential human right and must be respected and encouraged by educational systems" (UNESCO, 2000, p. 39). The postulates aim to meet the strong challenge of breaking mental structures, generating inclusive paradigms that allow people with or without SEN to be considered as social groups with high potential. Therefore, education is the means of eliminating differences by increasing its visibility across the board.

The International Education Office (IEO), at the 48th meeting of the International Conference on Education, focused on learning opportunities, conceived as existing and with little access for people with SEN. The conference defined inclusive education as the "process of addressing and responding to the diversity of the needs of all students by



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Revista Cátedra, *3*(1), pp. 73-90, January-April 2020. e-ISSN: 2631-2875 DOI: <u>https://doi.org/10.29166/10.29166/catedra.v3i1.1903</u> increasing participation in learning, cultures, communities, and the reduction of exclusion in Education" (CIE, 2008, p. 1).

There have been several interventions of international organizations for educational inclusion. These include: world forums, cooperation days, conferences addressing issues on democratic coexistence, inclusion and culture; as well as proposals to create educational systems that offer learning opportunities without discrimination. All these actions provide "inclusive guidance that represents the most effective means for combating discriminatory attitudes, creating host communities, building an inclusive society and achieving education for all..." (UNESCO, 2015, p. 10).

The 2030 global education agenda, focused on poverty eradication, is currently being developed, recognizing education as the key axis. The 17 (seventeen) agenda objectives are based on education, and specifically objective 4, which seeks to "guarantee inclusive and equitable quality education and promote lifelong learning opportunities for all" (UNESCO, 2016, p. 15). Therefore, Education is the means to provide students with SEN the skills needed to improve their quality of life and contribute to the societies in which they live.

## 3. Educative inclusion in Ecuador

The educative system in Ecuador promotes inclusion at all levels of education. Hence, educational institutions have been carrying out actions aligned to the postulates of education in the 21st century, one of them "learning to live together, learning to live with others" (UNESCO, 1998, p. 10). It breaks down any exclusion scheme and promotes healthy coexistence, in democracy and acceptance of individual differences of people with SEN.

The Ecuadorian state as a member of the UN, considering the postulates of UNESCO and other international guidelines, in faithful compliance with its responsibilities, has been promoting inclusive strategic efforts in response to the articles 11, numeral 2 of the magna carta promulgated in Montecristi in 2008, in which it is mentioned as a principle of equality that "all people are equal and will enjoy the same rights, duties and opportunities" (Asamblea Nacional Ecuador, 2008, p. 27).

This enactment determines that all people, even with individual differences, have the right to be included in the educational system. This is established as a Constitutional Mandate, section five, article 26 in which it is promulgated that:

Education is a right of people throughout their lives and an inescapable duty of the state. It is a priority area of public policy and state investment, guarantee of equality and social inclusion and an essential condition for the good living. Individuals, families and society have the right and responsibility to participate in the educational process (Asamblea Nacional Ecuador, 2008, p. 33).

The guarantee of equality and inclusion enacted in the previous article is concreted in a sequential and consistent way. To this end, the Constitution established the creation of the national system of inclusion and social equity<sup>1</sup>. In the same governing document, article

<sup>&</sup>lt;sup>1</sup> The system of Inclusion and Social Equity "is the articulated and coordinated set of systems, institutions, policies, standards, programs and services that ensure the exercise, guarantee and



46, numeral 3, the State is assigned the role of taking measures to give children, teenagers and adults "preferential care for a full social integration" (Asamblea Nacional Ecuador, 2008, p. 40).

Therefore, it has been established that the "state will ensure its incorporation into the regular education system and in the society" (Asamblea Nacional Ecuador, 2008, p. 40), by creating specific programs with the aim of eradicating exclusion, promoting the integration and inclusion of PCDs. These include national programs such as the Manuela Espejo Mission<sup>2</sup>, which aims to "care for people with disabilities, catastrophic diseases and children with HIV/AIDS in Ecuador" (SETEDIS, 2009, p. 1).

From 2017, the national development plan (2017 – 2021) arises as a new state planning agenda with the government change. It is created based on a diagnosis of the actions of the previous government period and proposes development axes whose objective is education.

Thus, one of the objectives of Axis 1 is "quality and inclusion: expanding opportunities in higher education" (SENPLADES, 2017, p. 68), in which free education is mentioned as a right until the third level, supporting equitable and inclusive access of students with SEN to the education system.

As a means of concretion of the provisions, the Organic Disability Law (LODDIS), Article 27, guarantees access to education to PCDs, mentioning that:

The State shall ensure that people with disabilities can access, remain and complete their studies in the National System of Education and the Higher Education System, in order to obtain education and training, attending classes in a specialized educational institution or in a school education institution, depending the case (CONADIS, 2014, p. 11).

In compliance with the constitutional postulates and LOODIS, guidelines have been adopted in elementary school and high school, in order to carry out educational inclusion processes. Thus, through the Organic Law on Intercultural Education (LOEI), Article 2 states that "priority and specialized care of children and teenagers with disabilities or who suffer from catastrophic diseases of high complexity" must be given (MINEDUC, 2017, p.4).

The Ministry of Education (MINEDUC) promotes guidelines in compliance with providing education as a constitutional right. Thus, Article 6 of the LOEI states that is an obligatory requirement of the State, to "develop and implement the curricular adaptations necessary

The Manuela Espejo Solidarity Mission is an unprecedented movement in the history of Ecuador; which was at first a scientific - medical study to determine the causes of disabilities and to know the biopsychosocial reality of this population from the biological, psychological, social, clinical and genetic points of view, in order to indicate real state policies, covering multiple areas such as health, education and social welfare



enforceability of rights and the fulfilment of the objectives of the program under development" (Asamblea Nacional Ecuador, 2008, p. 106)

<sup>&</sup>lt;sup>2</sup> Mission Solidaria Manuela Espejo is a biopsychosocial genetic clinical trial to study and register all people with disabilities on a national scale. For its part, the Joaquín Gallegos Lara program was created after the Manuela Espejo Mission detected the most critical cases of people with severe physical or intellectual disabilities living in an environment of poverty, being often abandoned during hours or days.

to guarantee the inclusion and permanence in the education system of people with disabilities, teenagers and pregnant young women" (MINEDUC, 2017, p. 12).

The entire legal framework concerning educational inclusion processes that are being managed in the country are based on the "regulations concerning the care of students with SEN in standard education institutions or in specialized educational institutions" (MINEDUC, 2013, p. 3), whose purpose is to "regulate the mechanisms of the National Education System for the care of people with SEN, whether or not they are associated with any disability" (MINEDUC, 2013, p. 3).

MINEDUC, by agreement No. 0259-13, issued in 2013, seeks to prevent the exclusion of children and teenagers from the education system. Therefore, it promotes the design and implementation of projects that strengthen the capacities of teachers and organizational structures, transforming regular school education institutions into inclusive institutions. To this end, it has given way to the "process of identifying and responding to the diversity of special needs of all students through greater participation in learning, cultures and communities" (p. 5)

As mentioned, the intention of State policies is currently to promote inclusion in the education system at all levels, in order to fulfill a process of responsibility around the good management of students with SEN in the classroom. The purpose is to make them active in an inclusive society in the future. This paradigm shift that has been proposed and implemented for its achievement in the country for more than ten years has become a national challenge. Therefore, teachers of elementary school, high school, third and fourth level are coresponsible for the Educational Inclusion.

To complete the process of educational inclusion, MINEDUC has conducted the organic restructuring of the undersecretary of educational coordination, creating a new management model "which includes 9 educational zones (Undersecretary's of the city of Quito and Guayaquil), 140 educational districts and 1117 educational circuits" (MINEDUC, 2013, p. 3), in order to have national coverage, under the guidelines applied through the national directorate of special and inclusive education, as a unit responsible for fulfilling the mission of:

Ensure that the National Education System is inclusive, by providing opportunities and ensuring the quality of educational care to the schoolage population with special, transitional and permanent educational needs, related or not related with any disability, for the development of its potential, skills, and social integration (MINEDUC, 2013, p. 10).

It is from 2009, under the concept of warm, inclusive and inclusive education that MINEDUC mentions that "12 regular schools were transformed into inclusive schools and 120 schools were sensitized. Seven guides for the care of students with special educational needs (SEN) were also designed, validated and reproduced, benefiting 3,000 students" (MINEDUC, 2010, p. 55). Es así como se promueve el libre acceso a la educación, en contra de todo tipo de discriminación.

En el país se ha marcado una trayectoria en la búsqueda de nuevas políticas de inclusión, plasmadas en el plan nacional de educación 2016 – 2025. En el cual se han establecido logros importantes entre ellos, el "proyecto caja de herramientas" (MINEDUC, 2016). El cual es una propuesta generadora de una pedagogía social e inclusiva que dota de posibilidades a los proyectos educativos institucionales. A más del proyecto mencionado el MINEDUC ha promovido acciones estratégicas entre ellas:



This is how free access to education is promoted against all kinds of discrimination.

A trajectory has been made in the country in the search for new inclusion policies, embodied in the national education plan 2016 – 2025, in which important achievements have been established, such as the "Toolbox Project" (MINEDUC, 2016), which is a proposal that generates a social and inclusive pedagogy that gives possibilities to institutional educational projects. In other words, MINEDUC has promoted strategic actions such as:

Guidelines for improving educational care for people with or without special educational needs related or not with a disability (...).

Bicultural Bilingual model for strengthening educational care for deaf people (...).

Educational options for the population with unfinished schooling to complete their studies (MINEDUC, 2016, p. 133).

The ten-year plan (2016 – 2025), operated through the strategic actions have originated the inclusion of students with SEN at all levels. In this way, the policy of non-discrimination and inclusion of the ten-year plan (2006 – 2015) has continued, whose educational reforms were aimed at improving quality.

With the above, MINEDUC performs concrete actions that have been taking place at this level of education. These actions can be observed in the infrastructure and in raising awareness and training of authorities and teachers. Among them, 140 district units are supporting inclusion (UDAI) at the national level, with the aim of ensuring the inclusion of students with SEN or not associated with any disability (MINEDUC, 2019, p. 60). The toolbox is a proposal to generate a social pedagogy of inclusion and nurture institutional educational projects (MINEDUC, 201, p.63). All these proposals have been implemented in order to meet the national objective of equal opportunities from a human rights perspective.

Having carried out the documentary analysis of the various actions, including programs and projects conducted by MINEDUC at the national level, MINEDUC as an educational regulatory body has generated organizational structures with the aim of:

- All ABC literacy, elementary school and high school "Monseñor Leonidas **Proaño" campaign:** it is a program executed through the undersecretariat of specialized and inclusive education, for people who have not been able to complete their studies in the periods and regular ages. To date, 218,000 young people and adults who have deficiencies in the learning process or have school laggards are covered. This program was developed in two phases, its purpose being that this population concludes its studies in approximately 5 years, since the country so far registers 5 million people with unfinished schooling (MINEDUC, 2018).
- **Pedagogical Accompaniment Program:** seeks to improve the relationship between teachers and students, through integrative actions that improve their skills. For this purpose, pedagogical optimization actions have been applied, with 24,560 teachers being trained to perform successful pedagogical accompaniment (MINEDUC, 2018).
- Educational Inclusion Support Program: this program has been implemented in school education institutions through organic structures created by the undersecretary of specialized and inclusive education. Being these: district



educational inclusion support units (UDAI) which are "technical-operational bodies that provide technical, methodological and conceptual support through the work of a team of professionals" (MINEDUC, 2019, p.1) to educational institutions. The Departments of Student Counseling (DECE) responsible for providing support to teachers and providing comprehensive attention to students in educational institutions.

- District Inclusion Support Units (UDAI), living organisms created in each of the 140 Districts<sup>3</sup>. Formed by a transdisciplinary team of clinical psychologists, psychopedagogues, special educators, language therapists, physical and occupational therapists. Its functions include identifying the type of SEN students and advising teachers and parents (MINEDUC, 2018, p.1).
- Departments of Student Counseling (*DECE*), structural organs created in educational institutions, with the aim of providing psychological, psychoeducational, emotional and social support and accompaniment to students and parents. These agencies carry out strategic actions under the comprehensive care model (MINEDUC, 2017b).
- Hospital Classroom Program, created in educational institutions to support students with SEN, who suffer from catastrophic diseases. It helps the student population that is behind in their studies because of their disease. Therefore, MINEDUC in agreement with the Ministry of Public Health (MSP) has implemented "45 state hospitals nationwide, addressed to children and teenagers with disabilities and with a health condition" (MINEDUC, 2016).

The above strategic actions demonstrate the government's interest in complying with international and constitutional guidelines for eradicating discrimination and exclusion of people with SEN, being MINEDUC the protagonist of structural changes in the education system in elementary school and high school, in order to ensure that the exit profile of students allows their access to higher education. Hence, the following section aims to address the capacity for educational innovation in teachers as the decisive factor in the success of educational inclusion.

## 4. Innovation

#### 4.1 Concept

The term innovation comes from the Latin *innovare*, whose meaning is "to change or alter things by incorporating novelties" (Medina Salgado and Espinosa Espíndola, 1994, p. 59). In the strict sense, the term innovation relates to the generation of new or different aspects, related to the improvement of goods, services or procedures. Thus, it differs from

<sup>&</sup>lt;sup>3</sup> The implementation of the New Model of Educational Management is in progressive development throughout the Ecuadorian territory, which includes 9 Educational Zones (Undersecretariats of Quito and Guayaquil), 140 educational districts and 1,117 educational circuits, and all areas, sections and addresses of the Ministry of Education. The target population covers all users of the National Education System, including students and former students of all levels and modalities, teachers and authorities of public institutions, tax authorities and individuals from Ecuador. In addition, it covers all officials of the Ministry of Education at the Central Level, the Zonal Educational Coordinations and the Provincial Directorates of Hispanic and Bilingual Education who are in transition to the districts



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the invention, which encompasses from new ideas that generate prototypes or new concepts.

To clarify the definition from an epistemological point of view, multiple meanings have emerged around the term innovation. In this regard, Sandoval and Martínez (2018) point out that there are three axes of action:

new, transformational and beneficial. The first as novel, is related to the dimension of something new, different, unknown so far (contextual – objective). The second transformational, is linked to the dimension of change, temporality, as they determine changes in products and/or services in relation to the needs. Finally, the third refers to the dimension of beneficial or advantageous to the community, which determines evolution and social progress (p.4).

By moving the concept of innovation to the education system, it relates to the generation of specific skills in teachers. To allow them to propose strategies that improve the teaching practice in the care of diversity in the classroom. All this related to the need to generate effective solutions in the process of identifying and responding to students' special needs in order to reduce discrimination and exclusion in education

In short, innovation on a personal judgment is the capacity evidenced when a person is able to generate new combinations in the field, one of them educational. Hence, the reciprocity of innovation with education is direct. Therefore, it is necessary to give special attention to students with SEN, from trained teachers who unleash innovative proposals in the pedagogical practice.

Today, although there is a clearly defined public policy, the weakness of providing relevant, timely and appropriate care to students with SEN lies in the lack of trained teachers, in specific topics such as inclusive curriculum and curriculum adaptations, since the gap is evident from the classroom because teachers cannot systematize curricular plans and design curricular adaptations according to the type of SEN of their students.

It can be concluded that to innovate in education is to generate new and different things that make the teaching practice much better. For this reason, teachers' ability to innovate at any educational level is related not only to their skills. But with the level of knowledge acquired in a formal way (knowledge acquired in a process of integral or regulated education) or informal (knowledge acquired freely and experientially).

### 4.2 Innovate to an inclusive approach

Based on the definitions analyzed, innovating is related to the value, the generation of something new, different and innovative. Innovation in education means that teachers are free to apply their knowledge with the aim of creating innovative proposals around methodologies, strategies, didactics and their application to improve the learning process with students who have individual differences, thus, improving their quality of life. Therefore, the objective is to increase their levels of relationships with members of their environment, in order to feel included in society.

Therefore, innovation, applied to education, is the starting point for breaking traditionalist, flat and coercive paradigm schemes, in which perfection is associated with structuralized schemes; but not in raising awareness and transforming mental positions that accept individual differences as the essence of an active and inclusive society, but that



the contribution of people with SEN allows the growth and integral development of individuals.

Educative innovation depends on the ability of people involved to establish new relationships between education and reality. All innovation experiences have as a priority the constant training of teachers and the production of materials for the educational practice. The teacher training is based on specific purposes and difficulties that teachers have when introducing and modifying their practice. Diversity in the classroom invites education professionals to generate dynamic, different and versatile alternatives to make their teaching action innovative.

Educational inclusion is the engine of innovation, as diversity in the classroom determines that educational actions are varied and responsive to needs. This stream of innovation in education is no stranger to the programs emerged at UNESCO, nor is it detached from the public policies of the countries.

One of the features that characterizes it is that, by having knowledge about SEN, it is proposed to contribute to the construction of fair societies. This educational action bases its approaches on the effective pursuit of the right to education, on democratization and on non-discrimination. This orientation of education with social origin is essential, so all effort must be made into educational practice, since it is on it that participation and innovation are carried out, it is the work area where the teacher reveals his/her professional capacity and passion to teach.

## 5. Educational inclusion

Educational inclusion promotes teaching action to admit students with individual differences in the classrooms, whatever the modality of study. It "responds to the guarantee of the right to quality education, through access, permanence and completion" (MINEDUC, 2019, p.1) of the studies. Considering the recognition and appreciation of diversity as a right, this implies responsibility on the part of those involved, who have a leading role in the process.

The State, responsible for linking international guidelines with national decisions, has established a legal area, supporting constitutional mandates in order to support inclusive work in the education system, and enhancing actions that are governed and delegated through the sectional agencies and ministries responsible for education at the national level.

Among them, MINEDUC, which is an entity that generated the inclusive education program, implemented through the project of the new inclusive education model. The aim is to "strengthen and improve care in specialized education and educational inclusion in ordinary education, for children and young people with special educational needs associated with or without any disability" (MINEDUC, 2012, p. 1).

Therefore, with the implementation of this project, educational institutions are committed to breaking down physical, architectural and technological barriers in their educational spaces. In addition, they sensitized the educational community to achieve true inclusion for non-discrimination. Educational units are responsible for supporting the development of innovative teacher proposals, contributing to greater social interaction.

Therefore, teachers are responsible for the pedagogical practice, thus, they must enhance innovative capacities aimed at improving educational inclusion processes, ensuring the



scope of the learning outcomes established in the curriculum to "facilitate these attention processes to the diversity of students" (Sarto Martín and Venegas, 2009, p. 149) with SEN.

In this circumstance, in order to manage teaching processes that ensure the scope of the learning objectives set out in the curriculum, teachers must acquire professional skills, related to enhancing the management of an educational process that is sustainable and inclusive. These competencies will strengthen cognitive capacities around educational inclusion, such as: curriculum design, curriculum adaptations and inclusive teaching proposals evidenced in the integral development of students with SEN.

The paradigm change of teachers in the pedagogical practice invites the generation of new mental structures, since the capacity for acceptance, tolerance and innovation are decisive in reaching a new way of thinking, in order for teachers to have adequate management of students with SEN in their classrooms.

This is not just a socio-educational change. These are structural and intrinsic changes in teachers, through awareness-raising processes and ongoing training, to determine the success or failure of inclusion processes.

Innovation in pedagogical practice allows teachers to generate creative and innovative curricular proposals, correlated with their students' special needs. It is there that a structural link is generated between educational inclusion and innovation of teaching work, based on non-discrimination. This determines that the teacher, being aware of his/her responsibility for educational inclusion, acts as a compensatory element of the deficiencies of students with SEN.

It is there that, according to UNESCO, innovation and inclusion are joined together as an informed initiative to fulfill the professional and social responsibility of the teacher, in order to train students who are whole, creative, critical, confident in their potential and are socially active, and whose insertion into the work is effective. In faithful compliance with the search for a contemporary world that has assumed full inclusion as a matter of law and not a privilege granted (UNESCO, 2006, p. 18).

According to Sarto and Venegas it is the moment when the teacher faces a process of educational inclusion in the classroom, where the teacher should be clear about the learning teaching process, and adopts a particularity in response to the requirements of students with SEN, by achieving a process of educational inclusion from the curriculum proposal in a different action and of greater responsibility with the rest of the group that has homogeneous educational needs (Sarto and Venegas 2009, p. 28). Innovation in teaching practice is not a particularity, but on the contrary it must be a generality in the teacher who is really committed and responsible with the inclusion process.

## 6. Conclusions

It was concluded that, despite the existence of a public policy promoting inclusion, there is a worn and, in many cases, little discernible link to innovation in the pedagogical practice. This is personally due to poor teacher training on educational inclusion issues, inclusive curriculum and curricular adaptations, which promote the inclusion of students with SEN.

Previous researches on the subject reveal that, in the country, there are few official databases that record the description of students with SEN. Demographic, employability and socio-economic status data also reflect that there are no educational inclusion protocols. "Existing initiatives to integrate PwD into education are few, isolated and centralized in large cities" (UNESCO, 2004, p. 3).



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Revista Cátedra, *3*(1), pp. 73-90, January-April 2020. e-ISSN: 2631-2875 DOI: <u>https://doi.org/10.29166/10.29166/catedra.v3i1.1903</u> Based on the above data and the results of the documentary analysis carried out, it could be determined that the topics covered are sensitive. Arguably, for many, they are utopian because of the difficulties that schools face in including students with SEN in the classrooms.

Despite this, speaking of inclusion openly and from a vision of social and educational acceptance has taken time and difficulties due to paradigmatic barriers. Thus, three decades later, in 1978, the Warnock Report concludes that there are no uneducated children, and introduces the term SEN for the first time, but this did not determine the open acceptance of working with students with SEN in classrooms, due to the resistances generated.

The difficulties identified in the inclusion processes stem from barriers of thought by the educational community, and even the teacher's fear of having students with individual differences in their classrooms, due to the lack of training in managing an inclusive curriculum that is versatile and promotes the application of curricular adaptations that respond to identified SEN. As well as the reality of treating students with SEN, which invites the development of pedagogical innovation.

Ecuador is no stranger to this reality, yet assertive actions in inclusion and educational innovation are created as a government decision from 2007, giving a strong emphasis on SEN associated with disability, in the government interest of an inclusive policy giving visibility to PCDs. This is how the MINEDUC school education body gives way to projects of social interest such as the implementation of Inclusive Schools.

This decision originated as a response of respect for the dignity of the human being and with the challenge to create a society sensitive to individual differences, promoting the inclusion of vulnerable population sectors, especially those that require priority attention. Therefore, educational inclusion is not an action of its own for students with disabilities, but for those who are part of priority care groups, in this reason the appropriate term is SEN.

In relation to the pedagogical innovation, although it is true that the Ecuadorian state has given way to methodological strategies such as the *Toolbox for educational inclusion*, the real innovative contribution arises from the initiative and capacities of teachers in the classroom, which make efforts in the face of their reality in the pedagogical practice.

The policy of educational inclusion reveals the actions carried out by government entities, such as MINEDUC, which have generated a solvent structure from the generation of inclusive schools, but lacks of inclusion protocol such as: scarce training in education community awareness programs; cognitive weaknesses on the part of teachers on specific topics such as inclusive curriculum and strategic methodologies that promote the inclusion of students with SEN; reduced contribution by teachers in the design of curricular adaptations; poor advice from district units to support inclusion and resistance to change by teachers, as most do their teaching work with large groups, making specific care difficult for students with SEN.

The analysis has made it possible to identify that, in Ecuador's education system, school institutions and teachers face common problems. It can therefore be determined that, in schools, there is a lack of professionals with specific training in inclusive education. This creates a barrier of knowledge in the classroom for the correct management of students with SEN, which is a limitation in the pedagogical practice.



In short, it was possible to determine that pedagogical innovation was created from the initiative of teachers. Its effective action in the classroom is the response to processes of inclusion in the framework of responsibility and professional vocation. Hence, the urgent need to train teachers with extensive knowledge in educational inclusion in response to diversity, which goes beyond public policy.



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# Análisis lingüístico femenino en el siglo XXI a través del discurso de Cynthia Viteri

# Female linguistic analysis in the 21st Century: the speech of Cynthia Viteri

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## Resumen

El propósito de este artículo es presentar de una manera general, mediante ejemplos prácticos, un análisis discursivo. Como sujeto de análisis se consideró a la Dra. Cynthia Viteri, por ser actualmente una de las mujeres más destacas en la política ecuatoriana y la máxima autoridad de la ciudad de Guayaquil, Ecuador. La antropología lingüística, la sociolingüística, la nueva dialectología y lo que en el ámbito anglosajón se denomina la "lingüística feminista" llevan varias décadas aportando datos que muestran cómo hombres y mujeres se construyen y se manifiestan de forma diferente en cuanto a la manera de utilizar las lenguas. El presente trabajo de investigación tiene un enfoque descriptivo, y se desarrolló mediante la observación continua de videos y conferencias emitidos por la actual alcaldesa de Guayaquil, Dra. Cynthia Viteri Jiménez, mismos que se reproducen en el canal de Youtube y corresponden a los meses entre enero y noviembre del 2019. El análisis lingüístico demuestra la combinación y conexión de expresiones que exteriorizan los actos comunicativos. Se hace mayor hincapié en formas lingüísticas como el léxico, la referencia, la coherencia (argumentación), la interacción de semántica y sintaxis (modalidad, aspectos, tiempo, negación, modificación adverbial, etc.), así como también en las manifestaciones del



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Revista Cátedra, 3(1), pp. 91-111, January-April 2020. e-ISSN: 2631-2875 DOI: <u>https://doi.org/10.29166/10.29166/catedra.v3i1.1925</u> lenguaje corporal del actor del discurso y además se puede observar que las diferencias de género son un hecho fundamental de la vida humana y no es sorprendente encontrarlas reflejadas en el lenguaje; por lo tanto, la atención al uso del lenguaje en el contexto social es muy importante.

## Palabras clave

Análisis, habla, lenguaje corporal, lenguaje femenino, lingüística.

## Abstract

The aim of this article is to present through practical examples a discourse analysis of Dr. Cynthia Viteri, who was considered as the subject of this analysis because she is actually one of the most prominent women in Ecuadorian politics and the highest authority of the city of Guayaquil, Ecuador. Linguistic anthropology, sociolinguistics, the new dialectology and what in the Anglo-Saxon field is called "feminist linguistics" have been providing data for decades to show, in terms of how to use the languages, the way men and women construct and manifest themselves differently. This research work has a descriptive approach, and it was developed through the continuous observation of videos and conferences issued by the current mayor of Guayaquil, Dr. Cynthia Viteri Jiménez, which are reproduced through the YouTube channel and correspond to the months between January and November 2019. The linguistic analysis shows the combination and connection of expressions that externalize the communicative acts. Greater emphasis is placed on linguistic forms such as lexicon, reference, coherence (argumentation), the interaction of semantics and syntax (modality, aspects, time, negation, modification adverbial, etc.), as well as the speaker's body language manifestations. Although, it is possible to observe that the gender differences are a fundamental fact of human life and it is not surprising to find them reflected in language; therefore, attention to the use of language in the social context is very important.

## Keywords

Analysis, spech, body language, female language, linguistics.

## 1. Introduction

There are more and more studies that address the relationships between linguistic uses and sexual differences. Linguistic anthropology, sociolinguistics, the new dialectology and what in the Anglo-Saxon field is called "feminist linguistics" have been providing data for decades that show how men and women are constructed and manifest themselves differently in terms of how to use the languages. Likewise, "the sexist uses of languages are being revealed and ways of use are proposed that allow women to be named" (Tusón, 2016, p. 138).

This research work has a descriptive approach and was developed through the continuous observation of videos and conferences issued by the current mayor of Guayaquil Dr. Cynthia Viteri Jiménez, which are reproduced on the Youtube channel and from January and November 2019. The main axes that have promoted research around linguistic diversity linked to sexual differences have been differences in linguistic acquisition according to sex; forms of cultural transmission and, in particular, the acquisition and development of communicative competence in children, boys, and girls. From a linguistic-discursive perspective, the first works on linguistic diversity and the sexual difference that have had a great impact and become a must-see are those of Lakoff (1975) and Tannen (1994). In the same way, to know the opinion of linguists and grammarians regarding the speech of women, see the third chapter of the work of Lozano Domingo (1995), as well as the book by



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Revista Cátedra, *3*(1), pp. 91-111, January-April 2020 e-ISSN:2631-2875 DOI: <u>https://doi.org/10.29166/10.29166/catedra.v3i1.1925</u> Yaguello (1978). Also, from the perspective of critical discourse analysis, see the works that appear in Wodak's work (1997).

This research consists of four parts: the first corresponds to the compilation of the videos of Cynthia Viteri, from January to November 2019; as a second part, the video observation focused on the verbal and non-verbal aspects was made; as a third part, the linguistic aspects of the discourse were analysed in detail and finally, the examples corresponding to the topics related to the particular discursive analysis were recorded within the female linguistic aspects.

## 2. Female language in the 21st century

Much is said about the advances in the female posture that broke through the 1970s and was strengthened in the 1980s, however, as far as women are concerned, "since ancient times and as a consequence of their biological and natural characteristics and possibilities, she was prepared to care for and educate children lovingly, teaching them the possibility of being expressive and showing emotions in different life situations" (Moreno, 2016, p. 1). This means that the woman was educated only to stay at home, to form a good home, to be a good housewife and an exemplary wife. Learning for women was only in the area of domestic work, care, and care for her husband and children. That is, the role of the wife was considered to be the most important to perform in a social environment.

Besides, certain authors point out that "the twentieth century has been that of the discovery of women, of their revolution and now in the twenty-first century will be the century of women" (Arnedo, et al., 2006, p. 2). Although it is very true that women still have a long way to go to move from entitlements to facts, it is worth acknowledging that in recent productivity studies they recommend the promotion of women for business leadership. It seems that female skills are more profitable for open modern systems of networking, group work, and solidarity.

As examples of women's advances in 21st-century politics, we can cite the following:

The current Norwegian government requires that there be at least two women in all the boards of directors, this century seems to be giving way to women in the world, so closed and traditionally male, especially in the world of politics, so by Example to the to end the first period of this century, there were in the world five women presidents in different countries: Ireland, Latvia, Finland, the Philippines, and Sri Lanka; and four prime ministers: Angela Merkel, the newly elected Chancellor of Germany, Helen Elizabeth Clark in New Zealand, Khaleda Zia in Bangladesh, and Luisa Diogo in Mozambique. Europe, Oceania, Asia and Africa, America was missing and, at the beginning of 2006, Michelle Bachelet was elected president of Chile. Within days, Ellen Johnson Sirleaf was acclaimed president of Liberia. Besides, it should be emphasized that four women have reached the highest levels of political power in Europe, three in Asia, two in Africa, one in America and one in Oceania (Arnedo, et al., 2006, p. 3).

As can be seen, the female figure has gained prestige in the 21st century, especially in the political domain and this can be verified in his body expression, which is not so different from the men's body language. Most of them use the same facial expressions and, for the most part, the same body language to express how they feel, how they attract each other, how they seek attention, and what their signs of anxiety are.



The female linguistic characteristics such as body expression, facial expression, morphosyntax, lexicon, proxemic, prosodic have allowed women to gain ground in all spaces and more recognized in the political domain.

## 3. Materiales y métodos

The present research work has a descriptive approach and was developed through the continuous observation of videos and conferences issued by the current mayor of Guayaquil Dr. Cynthia Viteri Jiménez, which are transmitted by the Youtube channel and months between January and November 2019. Currently, Cynthia Viteri Jiménez has a very diverse audience, which makes her an interesting character for the elaboration of a scientific article.

The procedure for conducting this research work consisted of following a series of steps, which are the following:

- 1. Compilation of the videos of Cynthia Viteri, which involved downloading the videos of the Youtube channel, corresponding to the months from January to November 2019 to be able to separate them for months;
- 2. The observation of all the videos collected, focused on verbal and non-verbal aspects from the perspective of the pragmatic, was then made;
- 3. The linguistic aspects of discourses were then analysed in detail and carefully: body language, implications, assumptions, acts of speech, interaction, cooperation, rapport, and female linguistic characteristics;
- 4. Finally, after an observation process and analysis of the collected videos, we proceeded to record the examples corresponding to the topics related to the particular discursive analysis within the female linguistic aspects.

To carry out this research process, the following videos were used:

https://www.youtube.com/watch?v=LrpIEnRs7NY; Theme: Dra. Cynthia Viteri – Radio Élite. https://www.youtube.com/watch?v=RXUL05XIj6s;Theme: Entrevista a la Alcaldesa – RTS. https://www.youtube.com/watch?v=Z7e4mA8XUdg; Theme: La propuesta de Cynthia Viteri para la Alcaldía de Guayaquil. https://www.youtube.com/watch?v=3DUNxbzi-oU; Theme: Cynthia Viteri critica medidas económicas del Gobierno. https://www.youtube.com/watch?v=vPJQKA5rJMg, Theme: Cynthia Viteri – enlace Radio Centro. https://www.youtube.com/watch?v=nCKEesewxfk, Context: ¡Con Guayaquil no se juega!

## 4. Speech Analysis

After the observation process, different examples taken from the videos of Cynthia Viteri Jiménez published on Youtube were chosen, as she says in her lectures, without any alteration; taking into account their female stance in the political domain. The examples listed below are classified according to the topics discussed and explained above.

### 4.1 Deixis

4.1.1 Personal	
Example 01	esto es una tarea de nunca acabar Luisa, <b>mi</b> compromiso no sé no solamente será continuar en la desintoxicación y seguir firmando
	los convenios que nos permitan salvar vidas
Example 02	recién llegamos al acuerdo de la semana pasada les diré el
	nombre del médico cabe destacar que los médicos en algunas de
	estas operaciones no cobran nada nosotros ponemos hospital



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anestesista recuperación ponemos todos <b>nosotros</b> ponemos hospital anestesista recuperación ponemos todo
Context: Interview to the Major $-RTS^1$
Guayaquil traerá los mejores equipos para <b>este</b> nuevo centro de rehabilitación física que además podrá atender a los niños con parálisis cerebral para <b>este</b> nuevo centro de rehabilitación física
Context: Entrevista a la alcaldesa -RTS <sup>2</sup>
ahora podemos ver con claridad cuál es el verdadero impacto de las medidas económicas adoptadas por <b>este</b> gobierno
Context: Cynthia Viteri criticizes the economic measures <sup>3</sup>
<b>Ayer</b> acabamos de dar a nuestros niños de la Escuela "4 de enero", niños no videntes, un aparatito hecho por Walt
Context: Cynthia Viteri – enlace radio centro <sup>4</sup>
<ul> <li> el gobierno no acaba de subir los pasajes del transporte público y de carga en todo el país esa es la verdadera medida que tomó el gobierno hace pocos días en materia económica</li> <li>Context: Interview to the Major -RTS<sup>5</sup></li> </ul>

Table 1. Deixis

#### 4.2 References and Inferences

#### 4.2.1 References

Example 07	es un placer estar con ustedes ahora en esta
	Analysis: Refers to journalists from Radio Élite.
	Context: Cynthia Viteri – enlace radio centro <sup>6</sup>
Example 08	esta nueva modalidad en exteriores que
	Analysis: It refers to the exteriors of the mayor of Guayaquil.
	Context: Dra. Cynthia Viteri – Radio Élite <sup>iError!</sup> Marcador no definido.

#### 4.2.2 Inferences

Example 09	qué bien de aquí mire un tema que realmente me resalta el
	presupuesto del 40 por ciento del presupuesto será destinado
	para la obra social esto se decidió en la última sesión esto va a ser
	replicado todos los años permanente me he puesto del municipio
	40 por ciento para la obra social permanentemente
	Analysis: The percentage of earmarked is sufficient for this
	activity.
	Analysis: The budget has already been approved.

<sup>1</sup> https://www.youtube.com/watch?v=RXUL05XIj6s

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<sup>&</sup>lt;sup>2</sup> https://www.youtube.com/watch?v=RXUL05XIj6s

<sup>&</sup>lt;sup>3</sup> https://www.youtube.com/watch?v=3DUNxbzi-oU

<sup>&</sup>lt;sup>4</sup> https://www.youtube.com/watch?v=vPJQKA5rJMg

<sup>&</sup>lt;sup>5</sup> https://www.youtube.com/watch?v=RXUL05XIj6s

<sup>&</sup>lt;sup>6</sup> https://www.youtube.com/watch?v=vPJQKA5rJMg

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 Analysis: A statistical study has been done before the adoption of
the budget.
Context: Dra. Cynthia Viteri – Radio Élite <sup>IErrorl Marcador no definido.</sup>

#### 4.2.3 Names and references

Example 10	la doctora <b>Cynthia Viteri</b> , un gusto
	Analysis: In reference to the Mayor of Guayaquil.
	Context: Dra. Cynthia Viteri – Radio Élite <sup>IErrorl Marcador no definido.</sup>
Example 11	haciendo matriz desde Radio Élite nos
	Analysis: Radio Elite interviews Cynthia Viteri
	Context: Dra. Cynthia Viteri – Radio Élite <sup>iError! Marcador no definido.</sup>

4.2.4 Co-texto	
Example 12	está más en la mira de convenciones de eventos internacionales
	que dejan, desde el taxista desde el transporte urbano económico,
	desde la gastronomía hoteles y todo dinero en el bolsillo de los
	guayaquileños de la gente que trabaja aquí, es un evento
	importantísimo que lo va a tener <b>Guayaquil</b>
	Analysis: "guayaquileños" refers to the citizens of the city of
	Guayaquil directly or indirectly favoured by this event.
	Context: Dra. Cynthia Viteri – Radio Élite <sup>¡Error! Marcador no definido.</sup>

#### 4.2.5 Anaphoric reference

Example 13	su sueño y coincidió con su cumpleaños
	Analysis: she refers to Sergio
	Context: Cynthia Viteri – Radio Élite <sup>,Error!</sup> Marcador no definido.
Example 14	así es que los concejales todos los quince le dieron una bicicleta
	por su <b>cumpleaños</b>
	Analysis: she refers to Sergio
	Context: Dra. Cynthia Viteri – Radio Élite <sup>iError! Marcador no definido.</sup>

Table 2. References and Inferences

#### 4.3 Presuppositions and declarations

#### 4.3.1 Potential

Example 15	este yo quiero que sea un programa permanente, poder ir realizando sueños a niños que tengan algún tipo de enfermedad
	catastrófica y que puedan realizar su sueño
	Context: Dra. Cynthia Viteri – Radio Élite <sup>iError!</sup> Marcador no definido.
4.3.2 Existential	
Example 16	pero que le he propuesto al gobierno central es su
	responsabilidad el tema de las drogas su sueño y coincidió con
	su cumpleaños
	Context: Dra. Cynthia Viteri – Radio Élite; <sup>Error</sup> ! <sup>Marcador</sup> no definido.
Example 17	y un mensaje final a las mamás que tenemos o que tienen yo
-	tengo nietos pequeños a las mamás que tienen sus hijos
	pequeños nosotros tenemos que llegar antes

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	Context: Dra. Cynthia Viteri – Radio Élite <sup>iError!</sup> Marcador no definido.
4.3.3 Factive	
Example 18	también <b>hay otra posibilidad</b> vamos a tomar la que mayor gente cubra mayor necesidad allá también <b>hay una que sale</b>
	Context: Dra. Cynthia Viteri – Radio Élite <sup>,Error</sup> ! Marcador no definido.
4.3.4 Lexical	ciertamente ya estamos, como dice la canción no hay cama para
Example 19	tanta gente, y es cada vez que estamos un poquito más apretados
	 Context: Dra. Cynthia Viteri – Radio Élite; <sup>Error</sup> ! Marcador no definido.
	¥
4.3.5 Structural	
Example 20	lo que sí, personalmente sigo insistiendo, es la renovación de la metrovía siguen muchos
	Context: Dra. Cynthia Viteri – Radio Élitei <sup>Error!</sup> Marcador no definido.
	Context. Dra. Cyntina viteri - Radio Enter-
4.3.6 No-Factive	
Example 21	este yo quiero que sea un programa permanente, poder in
	realizando sueños a niños que tengan algún tipo de enfermedad
	catastrófica y que puedan realizar su <b>sueño</b>
	Context: Dra. Cynthia Viteri – Radio Élite <sup>,Error</sup> ! Marcador no definido.
127 Factual	
4.3.7 Factual Example 22	la gente <b>está</b> pagando 35 centavos por rodar en estos buses que
	<b>son</b> eléctricos y que tienen aire acondicionado por ir más cómodos sin ningún problema
	Context: Dra. Cynthia Viteri – Radio Élite <sup>iError! Marcador no definido.</sup>
	Table 3. Presuppositions and declarations
4.4 Cooperation	
4.4.1 Maximum quant	
Example 23	<b>Gabriela Uquillas:</b> ¿Cuáles son las alternativas que ha propuesto
	el municipio y qué tienen en mente en relación con la vialidad la vialidad del transporte pesado?
	<b>Cynthia Viteri:</b> "esa vía no aguanta más tránsito la vía la costa no
	aguanta más tránsito y recuerda que también por la misma vía
	está proyectado el aeropuerto cuyos estudios ya estoy retomando
	y la nueva terminal satélite terrestre también vía la costa es ur
	polo de desarrollo y el único sitio para dónde va a crecer"
	Analysis: Cynthia in answering the reporter's question gives
	information with many details.
	Context: Cynthia Viteri talked to 5 citizens about the future of
	Guayaquil <sup>7</sup>

<sup>7</sup> https://www.youtube.com/watch?v=SuGVMJ0JI6k



Example 24	<ul> <li>Luisa - Entrevistadora RTS: ¿Cuál va a ser específicamente el aporte que nosotros sumaremos como ciudad con usted como la primera autoridad de Guayaquil a la cabeza para contribuir a la seguridad del puerto principal?</li> <li>Cynthia Viteri: "apoyar a la policía nacional tanto con recursos con tecnología y con infraestructura si podemos resumir cuál es la propuesta y la acción desde el municipio de Guayaquil que como tú sabes luisa no le compete la seguridad competencia exclusiva del estado hemos llegado a un convenio con el ministerio del interior- y también con el consejo de la judicatura y la fiscalía</li> </ul>
	general del estado"
	Analysis: Cynthia in answering the question gives many details about which institutions take part in the security and about the conventions made to solve the problem of insecurity.
	Context: Interview to the Major -RTS <sup>8</sup>

#### 4.4.2 Relationship maxims

Example 25	Gabriela Uquillas: ¿Cuáles son las alternativas que ha propuesto
	el municipio y qué tienen en mente en relación con la vialidad la
	vialidad del transporte pesado?
	Cynthia Viteri: "esa vía no aguanta más tránsito la vía la costa no
	aguanta más tránsito y recuerda que también por la misma vía
	está proyectado el aeropuerto cuyos estudios ya estoy retomando
	y la nueva terminal satélite terrestre también vía la costa es un
	polo de desarrollo y el único sitio para dónde va a crecer"
	Analysis: Cynthia Viteri does not respond directly the question
	that the reporter asked her.
	Context: Cynthia Viteri Cynthia Viteri talked to 5 citizens about
	the future of Guayaquil <sup>9</sup>
Example 26	Entrevistadora RTS: ¿Cuál va a ser específicamente el aporte que
	nosotros sumaremos como ciudad con usted como la primera
	autoridad de Guayaquil a la cabeza para contribuir a la seguridad
	del puerto principal?
	Cynthia Viteri: "apoyar a la Policía Nacional tanto con recursos
	con tecnología y con infraestructura si podemos resumir cuáles
	propuestas y la acción desde el Municipio de Guayaquil que como
	tú sabes Luisa no le compete la seguridad competencia exclusiva
	del Estado hemos llegado a un convenio con el Ministerio del
	Interior- y también con el Consejo de la Judicatura y la Fiscalía
	General del Estado"
	Analysis: Cynthia Viteri answers the question, but indirectly by
	providing a lot of information.
	Context: Interview to the Major -RTS <sup>10</sup>

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<sup>&</sup>lt;sup>8</sup> https://www.youtube.com/watch?v=RXUL05XIj6s

<sup>&</sup>lt;sup>9</sup> https://www.youtube.com/watch?v=SuGVMJ0JI6k

<sup>&</sup>lt;sup>10</sup> https://www.youtube.com/watch?v=RXUL05XIj6s

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Cuadro 4. Cooperación

4.5 Implicatures	
4.5.1 Escalar	<u>,  </u>
Example 27	un gusto un, placer estar con ustedes <b>ahora</b> en esta nueva
	modalidad en exteriores Context: Dra Cumthia Vitori - Dadia Élita11
	Context: Dra. Cynthia Viteri – Radio Élite <sup>11</sup>
Example 28	haciendo matriz desde radio Élite nos represa en varias emisoras un abrazo a <b>todos</b> pues sí a la orden yo quería tomar un
	tema de la semana
	Context: Dra. Cynthia Viteri – Radio Élite <sup>12</sup>
452.0	
4.5.2 Conversational	
Example 29	pero su sueño era ser alcalde por un día y hemos <b>establecido</b>
	un <b>programa en la dirección de acción social</b> , Boris para hacer
	realidad los sueños de los niños sobre todo los niños que padecen
	enfermedades muy duras como cáncer hay otros niños también
	que tienen otro tipo de enfermedades catastróficas muy muy
	duras y queremos hacer este programa se llama fin consiste en
	que si en este caso Sergio había tenido el sueño es ser alcalde
	<b>pueda estar presente</b> en una sesión dio inicio a la sesión
	Context: Dra. Cynthia Viteri – Radio Élite <sup>iErrorI</sup> Marcador no definido.
4.5.3 Conventional	
Example 30	presenció todo lo trataban como alcalde <b>desde el principio</b> ,
Lixample 50	desde que llegó al municipio los policías municipales que se le
	cuadraban cuando él pasaba
	Context: Dra. Cynthia Viteri – Radio Élite <sup>iError! Marcador no definido.</sup>
	Table 5. Implicatures
4.6 Speech Acts	
4.6.1 Locutionary Acts	
Example 31	gracias a esas mil cien cámaras, nosotros podemos ver dónde
Example 51	
	hay accidentes de tránsito incendio y situaciones de riesgo y
	también vemos asaltos vemos agresiones vemos bandas y qué
	homas hasha nasatras hasta share la polisía si tionan algún
	hemos hecho nosotros, hasta ahora la policía si tienen algún
	representante voluntariamente porque va siempre van hay que
	representante voluntariamente porque va siempre van hay que decirlo claro ellos van en la corporación
	representante voluntariamente porque va siempre van hay que decirlo claro ellos van en la corporación Analysis: The purpose of this speech is to "inform"
	representante voluntariamente porque va siempre van hay que decirlo claro ellos van en la corporación Analysis: The purpose of this speech is to "inform" Context: Dra. Cynthia Viteri - Enlace Radio Águila <sup>13</sup>
Example 32	representante voluntariamente porque va siempre van hay que decirlo claro ellos van en la corporación Analysis: The purpose of this speech is to "inform" Context: Dra. Cynthia Viteri - Enlace Radio Águila <sup>13</sup> otra buena noticia John y para todos los que me escuchan es que
Example 32	representante voluntariamente porque va siempre van hay que decirlo claro ellos van en la corporación Analysis: The purpose of this speech is to "inform" Context: Dra. Cynthia Viteri - Enlace Radio Águila <sup>13</sup>

<sup>11</sup> https://www.youtube.com/watch?v=LrpIEnRs7NY

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<sup>&</sup>lt;sup>12</sup> https://www.youtube.com/watch?v=LrpIEnRs7NY

<sup>&</sup>lt;sup>13</sup> https://www.youtube.com/watch?v=A8gZRwVIDuU

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#### 4.6.2 Ilocucionary Acts

Example 33	gracias a esas mil cien cámaras nosotros podemos ver dónde
Example 55	hay accidentes de tránsito incendio y situaciones de riesgo y
	también vemos asaltos vemos agresiones vemos bandas y que
	hemos hecho nosotros hasta ahora la policía si tienen algún
	representante voluntariamente porque va siempre van hay que
	decirlo claro ellos van en la corporación
	Analysis: The purpose of this speech is to inform the public that
	the security issue is one of the priorities for the mayor.
	Context: Dra. Cynthia Viteri - Enlace Radio Águila <sup>iError!</sup> Marcador no
	definido.
Example 34	otra buena noticia John y para todos los que me escuchan es que
	hicimos juntos con el Banco del Pacífico con su con quien lo dirige
	Efraín Vieira el convenio del banco de oportunidades de manera
	distinta que hicimos ahora los créditos no van no son hasta 500
	dólares van de 500 dólares hasta 1500 dólares eso lo logramos en
	estos 60 días
	Analysis: The purpose of this context is to communicate to the
	Guayaquil residents about the new possibilities of credits, which
	they can access at the Pacific Bank.
	Context: Dra. Cynthia Viteri - Enlace Radio Águila <sup>iErrorl Marcador no definido.</sup>

#### 4.6.3 Perlocucionary Acts

1.0.5 Terrocacionary /	
Example 35	gracias a esas mil cien cámaras nosotros podemos ver dónde hay accidentes de tránsito incendio y situaciones de riesgo y también vemos asaltos vemos agresiones vemos bandas y que hemos hecho nosotros hasta ahora la policía si tienen algún representante voluntariamente porque va siempre van hay que decirlo claro ellos van en la corporación
	Analysis: The effect of this speech is to reassure citizens about the issue of crime, telling them that more security options for citizens have been incorporated.
	Context: Dra. Cynthia Viteri - Enlace Radio Águila <sup>IErrorl</sup> Marcador no definido.
Example 36	otra buena noticia John y para todos los que me escuchan es que hicimos juntos con el Banco del Pacífico con su con quien lo dirige Efraín Vieira el convenio del banco de oportunidades de manera distinta que hicimos ahora los créditos no van no son hasta 500 dólares van de 500 dólares hasta 1500 dólares eso lo logramos en estos 60 días
	Analysis: The effect that causes this information is to encourage
	Guayaquil residents to apply to new bank credit opportunities.
	Context: Dra. Cynthia Viteri - Enlace Radio Águila <sup>ıError!</sup> Marcador no definido.



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4.7.1 Representatives	
Example 37	<b>yo creo</b> que el embarazo y lo digo solo de manera particular en
	mi caso específico me salvó de otro destino me salvó y otro destino
	porque a esa edad a mí no me importaba nada
	Analysis: Cynthia Viteri, from her point of view, indicates that in
	one way or another pregnancy marked her life in a very positive
	way for her professional life.
	Context: CatolicaTV - Perfil Cynthia Viteri <sup>14</sup>
Example 38	yo creo que por eso Dios nos guía y podemos o tratamos como
	nos esforzamos por hacer las cosas bien cuesta mucho trabajo
	hasta 500 dólares van de 500 dólares hasta 1500 dólares eso lo
	logramos en estos 60 días
	Analysis: In this part of the video Viteri shares her faith in God,
	who for her is a very important pillar in her entire life
	Context: Cynthia Viteri, la alcaldesa: "Guayaquil es mi corazón" -
	MarielaTV <sup>15</sup>
4.7.2 Expressive	
Example 39	el trabajo más emocionante lo que más me gusta de todo esto es
2	la calle me encanta poder regresar a la calle me asfixia en los
	escritorios
	Analysis: Cynthia Viteri expresses that she loves being in the
	streets, instead of being in an office.
	Context: Cynthia Viteri, la alcaldesa: "Guayaquil es mi corazón" -
	MarielaTV <sup>15</sup>
Example 40	no me gustaba la locución fui muy poco tiempo locutora
	porque era muy tenso tener que estar arreglada, pintada,
	maquillada vestida a una hora determinada
	Analysis: The Mayor of Guayaquil shares that she worked as an
	announcer for a while, but it was an activity she did not like.
	Context: Cynthia Viteri, la alcaldesa: "Guayaquil es mi corazón" -
	MarielaTV <sup>15</sup>
4.7.3 Directives	
Example 41	la democracia la democracia no caerá en las calles de Guayaquil
	y menos un 9 de octubre que viva Guayaquil
	Analysis: With this speech, Cynthia Viteri tries to persuade the
	people of Guayaquil to do not allow people outside the city to
	destroy what they have built for years.
	Context: said this in her speech at the march for peace in
	Guayaquil - Teleamazonas <sup>16</sup>

#### 4.7 Speech Classification

<sup>14</sup> https://www.youtube.com/watch?v=FpGT43wQOXI

<sup>&</sup>lt;sup>15</sup> https://www.youtube.com/watch?v=sUW2MDNTD7c

<sup>&</sup>lt;sup>16</sup> https://www.youtube.com/watch?v=lKe9TkSfM7E

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Example 42	somos la policía que aguantó humillación y golpe para no caer en la provocación somos los agentes de la gn, de los metropolitanos, de justicia y vigilancia del mercado del municipio de Guayaquil que terminaron	
	Analysis: In this video, Cynthia Viteri, through the speech in the march for peace motivates its citizens to take care of their city and do not allow themselves to fall into the provocation that can cause	
	an irreparable damage in Guayaquil.	
	Context: Cynthia Viteri said this in her speech at the march for peace in Guayaquil – Teleamazonas <sup>16</sup>	
4.7.4 Commissives		
Example 43	llegamos a un acuerdo que beneficia a los guayaquileños porque eso es lo que me compete por un lado <b>nosotros haremos la</b> <b>desintoxicación</b> con medicamentos aprobados por el ministerio psiquiátrico y en personal psicólogos y psiquiatras también nuestra primera clínica de rehabilitación móvil	
	Analysis: Cynthia Viteri indicates that she has a plan for the future, such as the detoxification of young drug addicts, which will be accomplished in a not too distant future.	
	Context: Dra. Cynthia Viteri - Enlace radial Radio Centro <sup>17</sup>	
Example 44	<b> ese es nuestro nuevo plan y llegaré</b> a un acuerdo porque sé que lo haremos con el ministerio de educación para poder ir a las escuelas fiscales y prevenir en nuestros niños que sean los próximos que caigan en este desastre	
	Analysis: In this interview, Mayor Cynthia Viteri announces to her audience the plan she has to improve the quality of Education.	
	Context: Interview Mayor Cynthia Viteri – RTS <sup>18</sup>	

Table 7. Speech Classification

#### 4.8 Politeness and Interaction

4.8.1	Politeness Amabilidad	

Example 45	llegar nosotras y nosotros antes que ellos al corazón a la mente
	y a la inteligencia en nuestro sitio en un abrazo para <b>ustedes</b>
	Analysis: <b>ustedes</b> , she refers to the Radio Élite's audience
	Context: Dra. Cynthia Viteri – Radio Élite <sup>19</sup>

Table 8. Politeness and Interaction

After an in-depth analysis from each of the examples described above and with the observation of Dr. Cynthia Viteri's videos, it has been possible to observe some of her own linguistic feminine characteristics, the same ones that can be evidenced in the following examples taken from his videos.

#### 4.9 Prosody and paralinguistics elements

<sup>&</sup>lt;sup>17</sup> https://www.youtube.com/watch?v=vPJQKA5rJMg

<sup>&</sup>lt;sup>18</sup> https://www.youtube.com/watch?v=RXUL05XIj6s

<sup>&</sup>lt;sup>19</sup> https://www.youtube.com/watch?v=LrpIEnRs7NY

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<sup>20</sup> https://www.youtube.com/watch?v=nCKEesewxfk

municipio, que ella sabe	e porque es abogada, para que el municipio
se haga cargo de la segu	ıridad integral de la ciudad
Context: ¡Con Guayaqui	l no se juega! <sup>20</sup>

#### 4.9.2 Lexicon

Example 05	así es que no hay tiempo, la vida tan <b>pequeñita</b> cambia Mariela
	tan pequeñita hace poco éramos veinteañeras ahora yo soy más
	de 50, 53 tú no
	Analysis: In this context, a diminutive is used to refer to the great
	affection and emotion that reminds her of the time she was young.
	Context: Cynthia Viteri, la alcaldesa: "Guayaquil es mi corazón" - MarielaTV <sup>21</sup>
Example 06	me incorporé y cuando ya me incorporé ya tenía tres hijos Johana Julie y Juliana y ahora a ellos ya tienen la 36 el otro 30 la otra 28 y mis bebés que son mis gemelos de 18 años varón y mujer que ya se gradúa en este año ingresar a la universidad y que ahora son desde que nacieron son como mis niños <b>pequeñitos</b> y no termino de verlos crecer nunca creo
	Analysis: This video specifically talks about her family, her life; therefore, you can see the affection and emotion when expressing her family, as well as she uses diminutives to emphasize the great
	love for her children.
	Context: CatólicaTV - Perfil Cynthia Viteri <sup>22</sup>

#### 4.9.3 Textual theme organization

Example 07	lo único que no puedes hacer es quedarte sentado esperando a ver qué haces no para esparcir estar estudiando ya el pre de una carrera y sé pero que sigue en el camino vas a saber pero y en el análisis que pasa en la retrospectiva que pasa en pensar y hacer una yo no soy de eso, yo tengo como tu, camino, camino, camino, camino, si hay una y decidido por qué camino ir exacto, exacto pero todo rápido todo el vuelo así es que no hay tiempo la vida tan pequeñita cambia bailar tan pequeñita hace poco éramos ingeniera ahora yo soy más de 50	
	Analysis: In this part you can clearly see the interruptions by the two people (Cynthia and Mariela), feminine linguistic characteristics, which indicate cooperation and indicate understanding of the subject as well.	
	Context: Cynthia Viteri, la alcaldesa: "Guayaquil es mi corazón" - MarielaTV <sup>23</sup>	
Example 08	respondiendo a tu pregunta ningún acto de violencia venga de donde venga y si se da pues va a ser sancionado no	

<sup>21</sup> https://www.youtube.com/watch?v=sUW2MDNTD7c

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<sup>&</sup>lt;sup>22</sup> https://www.youtube.com/watch?v=FpGT43wQOXI

<sup>&</sup>lt;sup>23</sup> https://www.youtube.com/watch?v=sUW2MDNTD7c

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solamente administrativamente sino que si el caso lo amerita vaso tras día hasta entonces en general los agentes de la policía metropolitana o sea lo que se analiza van a ir destinados a término seguridad en general es un programa piloto y vamos a seguir cuidando el orden de la ciudad y protegiendo a la gente de la delincuencia pero de manera cómo
lo deben hacer cada funcionario del Municipio
Analysis: In this video, you can clearly see the interruptions in the
interview questions, without losing the thread of the topic, which
 indicates cooperation and understanding of these questions.
Context: The proposals of Cynthia Viteri for the Mayor's Office of
 Guayaquil - Teleamazonas <sup>24</sup>

#### 4.9.4 Non verbals elements (Kinesics y proxemics)

Analysis: In this video, you can show the cross-legged posture and
the use of the hands to express and answer the questions.
Context: Mayor Cynthia Viteri's interview - RTS <sup>25</sup>
Analysis: It is very clear the proximity between Mariela and
Cynthia at the time of speaking, as well as the crossed legs
throughout the interview, hand movement and facial gestures.
Context: Cynthia Viteri, la alcaldesa: "Guayaquil es mi corazón" –
MarielaTV <sup>26</sup>

Table 9. Prosody and paralinguistics elements

#### 4.10 Analysis characteristics

Other aspects of meaning depend more on the context and the communicative intentions of the speakers, and that it should be considered that "communication depends not only on recognizing the meanings of the words but also on what the speakers mean at that specific time" (Álvarez, 2019, p. 15). The discipline that helps to understand these meanings is Pragmatics, i.e., the interpretation of the meanings in the context of extra linguistic elements and communicative situations.

The invisible meaning must be taken into account, "recognize what is meant even when it is not said" (Yule, 2006, p. 112). The two main types of context are studied: the linguistic (context) and the physical. Quite related to the latter is the concept of deixis, as can be seen in Table 1; concerning the concept of reference as in Table 2, thus, it is not the words that refer by themselves, but the people. It should not be confused with inference, which refers to the process by which conclusions are derived from propositions.

The anaphora, consists in the repetition of one or several words at the beginning of two or more lines of a verse of a stanza or a sentence, it corresponds to the second time a reference is used, the first is the antecedent; on the other hand, the presuppositions are what a speaker assumes is true or known to as a listener, as can be seen in Table 3. It continues with speech acts and studies how their use both direct and indirect is related to courtesy or

<sup>&</sup>lt;sup>24</sup> https://www.youtube.com/watch?v=Z7e4mA8XUdg

<sup>&</sup>lt;sup>25</sup> https://www.youtube.com/watch?v=RXUL05XIj6s

<sup>&</sup>lt;sup>26</sup> https://www.youtube.com/watch?v=sUW2MDNTD7c

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image, either negative or positive. Speech analysis deals with the study of language in texts and conversations. Table 4 shows the analysis of conversations and how the participants can act when they take turns and manage endpoints. The principle of cooperation with Grice's four maxims is also analyzed:

- a) Maxims of quantity, when information necessary for the purpose of the conversation is provided.
- b) Maxims of quality, the information provided must be truthful.
- c) Maxims of relation, if the contribution of information is relevant to the topic of the conversation.
- d) Maxims of manner, the information should be clear and brief to avoid ambiguities.

Unlike syntactic and semantic rules, pragmatic principles and conventions work both when they are apparently violated, "when speaker S has listener H to recognize the apparent violation and to make the appropriate contextual adjustment, such as when they are observed or they violate with ostentation" (Horn & Ward, 2006, p. 8). Therefore, neither the principle of cooperation nor the corresponding maxims are designed as prescriptions for ethical actions or as ethnographic observations, a more precise approach is to see them as predetermined configurations whose mutual awareness is shared by the speech of the participants.

### 4.11 Female language's characteristics

Through both, observation and interviewing, it is possible to gather information on how speech acts are performed in a given speech community, such as for example, in the workplace where requests are made to colleagues, they reject requests from older people status and thank people on duty, such as cafeteria workers or custodians, example in Table 5. The way to point it out must be related to "what they say / how they say it, speed of delivery and tone of voice / and their nonverbal behavior as facial expressions, body posture and gestures say" (Ishihara & Cohen, 2010, p. 230). Depending on the language and culture, it may be strategic for the speaker to adjust the performance of the speech act according to the age, relative status or gender of the listener, as it can be seen in Table 6. He or she would also need to know what it means to ask something, for example a car, in this particular context, that is, how large is the obligation that is considered in that culture, if a car is a daily necessity or a luxury and in that specific context, borrow a new car and relatively valuable compared to an old "spare" car.

Therefore, "the natural discourse recovered through the corpus data reveals that it could take several turns for the interaction to resolve itself, in one way or another" (Ishihara and Cohen, 2010, p. 238). The realization of effective speech acts is related not only based on the knowledge of what is appropriate or not in certain cultures, but also of the knowledge of the language to do them appropriately, as example is Table 7.

Some of the main female language characteristics are mentioned:

The desire to include other participants as equals in the speech, emphasizing the relationship with them; extreme attention to outside words and external messages - verbal or nonverbal; the express indication of their listening and involvement in the conversation; a search for privacy; the development of issues in a cooperative way. While for the masculine style, he mentions the desire to affirm himself in front of the other participants; their participation is measured more by the type of intervention than by the demonstration of attention; a search for objectivity and distancing; the development of themes individually and



frequently competitively; a seemingly hostile expression of male solidarity (Bengoechea, 1996, p. 3).

Women's body language is not so different from men's body language. Everyone uses the same facial expressions and, for the most part, the same body language to express how they feel, how they attract each other, how they seek attention, and what their signs of anxiety are.

It is estimated that "women can effortlessly pronounce an average of 6,000 to 8,000 words a day" (Pease & Pease, 2001, p. 98). In addition to that you can additionally use between 2,000 and 3,000 sounds to communicate, and about 10,000 gestures and facial expressions. More than 20,000 communication units to transmit a certain message. While man, on the other hand, uses only between 2,000 and 4,000 words, between 1,000 and 2,000 sounds and emits at most 3,000 body language signals. In other words, its daily average amounts to about 7,000 communication units. A third of what women emit.

Besides, it is added that, at the time of communicating, "women think out loud and consider this type of behaviour as a gesture of friendship because speaking they allow others to share their thoughts" (Pease & Pease, 2001, p. 99). Moreover, they release their feelings to face them better. However, men do not usually understand this attitude and understand it as the woman is passing them a list of problems to solve as soon as possible. However, they do not expect answers, but to have someone who listens to them carefully or confirms what they say, as example is Table 8.

It can be noted that, for men, "conversation is the way to negotiate their status in the group and prevent people from pushing around them. Man uses the talk to preserve his independence" (Tannen, 1991, p. 21). Women, on the other hand, use conversation to negotiate closeness and intimacy; In fact, talking is the essence of intimacy, so being best friends means sitting and talking. For boys, on the other hand, activities, doing things together, are central. Simply sitting and talking is not an essential part of friendship. Besides, for women, talking about problems is the essence of the connection, see Table 9. Men, however, when they hear the problems, interpret it as a request for advice, so they respond with a solution.

If an explanation for the above is sought, it could be mentioned anthropologically that "men evolved as food hunters, not as communicators" (Pease & Pease, 2001, p. 89). Instead, women used to spend their days in the company of other women and children in the group and therefore developed the ability to communicate successfully in order to maintain relationships.

The evolution from the fundamentally individualistic subsistence activities of the higher primates to the complex cooperative enterprise of hunting and gathering surely required efficient communication. A popular hypothesis of language development includes the idea that in a first stage it would have been a gesture language - gesturing, remember, it is something that human beings do frequently, especially when they do not find the right words.

## 5. Conclusions

The feminine language is manifested in Dra. Cynthia Viteri in a very clear and evident way, such as the use of prosody, paralinguistic elements, body language, and a more emphatic intonation, vocal lengthening, also makes a change in tone of voice when you need to emphasize something very important. As well as frequent use of vocalizations such as (mmm, aha or similar) to indicate that you are following the dialogue or an interview.



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Revista Cátedra, *3*(1), pp. 91-111, January-April 2020. e-ISSN: 2631-2875 DOI: <u>https://doi.org/10.29166/10.29166/catedra.v3i1.1925</u> Another important element about feminine language is morphosyntax where it makes use of the second person of the singular and the first person of the plural, to include the person or persons with whom she is interacting. Besides, the frequent use of interrogative and exclamative sentences is observed (nooo ?, truue ?, eeeh ?, what if yess ?, do not you thinnk?).

In the dialogues presented by Dra. Viteri, the vocabulary refers to private areas such as family and home; while the affections are manifested in the use of diminutives and words that belong to the lexical part of the feminine language. The thematic textual organization is an aspect that is highlighted in Viteri's videos, and that is useful for the construction of a shared speech; In addition to contributing ideas based on their own experience.

Nonverbal elements such as kinesics and proxemics are present in Viteri's dialogues and interviews, through kisses in greetings and greater proximity to the interviewer when they are speaking; on the other hand, the gestural movements of both the hands and arms are performed in a space closer to the body itself, with the forearm almost attached to the thorax, which is very common in it, as well as the crossing legs by the knees or together or crossed, as part of the representation of the characteristics of female language.

Finally, gender differences are a fundamental fact of human life and it is not surprising to find them reflected in language. That should be noted that the distinction between the language of men and women is a symptom of a problem in our culture, not the problem itself. It reflects the fact that men and women are expected to have different interests and roles, hold different types of conversations and react differently to other people. Therefore, more attention should be given to the use of language in the social context.

Legal equality between men and women and the massive incorporation of women into all public and private spheres have modified the way they speak, have feminized many terms referring to trades, positions, and professions and forced expressive changes in the formal language and politically correct. However, it is enough to listen with the intent to any everyday conversation - no matter how banal or professional - to discover that the usual language is full of expressions and structures that help identify the speaker and the intention of his speech



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## Aproximación al estado situacional de los derechos docentes en la década de gobierno correísta, Ecuador

## Approach to the situational state of the educational rights in the decade of correísta government, Ecuador

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#### Resumen

El estudio analiza la situación de los derechos del profesorado ecuatoriano en los ámbitos laboral y gremial durante la década de gobierno correísta. Se trata de una investigación necesaria en la academia, que recoge las apreciaciones de docentes pertenecientes al sector de servidores públicos regentados por el estado. La pertinencia radica en la descripción de la disputa entre el magisterio organizado en su gremio, la Unión Nacional de Educadores (UNE), con el poder gubernamental liderado por el controvertido Eco. Rafael Correa, durante la década 2007-2017. La investigación es fundamentalmente cualitativa, retrospectiva, transversal y descriptiva. El instrumento empírico es la encuesta aplicada a una población de 300 docentes en servicio, indagados durante el periodo lectivo 2017-2018. Complementariamente se utilizó entrevistas a profundidad aplicada a profesionales expertos en derechos humanos y participación ciudadana. Como resultados más sobresalientes se encontró que, mayoritariamente, los docentes perciben haber sido objeto



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Revista Cátedra, *3*(1), pp. 112-130, January-April 2020. e-ISSN: 2631-2875 DOI: <u>https://doi.org/10.29166/10.29166/catedra.v3i1.1853</u> de vulneración en sus derechos, especialmente laborales, sindicales y de libertades civiles. Las afectaciones sistemáticas al magisterio, como sector profesional y a los docentes en particular, se produjeron por una acción política intencional planeada por el poder del estado. Los datos de campo también demuestran que unos pocos docentes aprecian haber sido beneficiados por el gobierno.

## Palabras clave

Correísmo, derechos, docentes, Estado, política.

## Abstract

The study analyzes the situation of the rights of Ecuadorian teachers in the labor and union spheres during the decade of correísta government. This is a necessary investigation in the academy, which includes the assessments of teachers belonging to the public employees run by the state. The relevance lies in the description of the dispute between the teachers organized in their guild, the National Union of Educators (UNE), with the governmental power led by the controversial Eco. Rafael Correa, during the 2007-2017 decade. The research is fundamentally qualitative, retrospective, transversal and descriptive. The empirical instrument is the survey applied to a population of 300 teachers in service, investigated during the 2017-2018 school period. In addition, interviews were applied to professional experts in human rights and citizen participation. As more outstanding results it was found that, mostly, teachers perceive having been subject to violation of their rights, especially labor, union and civil liberties. Systematic effects on teachers, as a professional sector and teachers in particular, were produced by an intentional political action planned by the power of the state. Field data also show that a few teachers appreciate having been benefited by the government.

## Keywords

Correísmo, rights, teachers, state, politics.

## 1. Introduction

The political analysis in Ecuador on the Government of Rafael Correa Delgado (2007-2017) from his arrival in the presidency in January 2007, until its completion in May 2017, is highly controversial. A very representative political sector defends the actions and practices of correism, contrary to another important sector that also regards it as repressive and antisocial rights.

During the correist decade it has been repeatedly proven that there was social repression of the state against social movements. The Bureau for Truth and Justice in February 2019 "concluded that the former staff and officials of that government used justice to persecute opponents and criminalize social protest" (El Telégrafo, 2019, p. 12). Precisely the study is an approximation to the reality of the public teacher's guild in Ecuador, called the National Union of Educators (UNE).

The presidential speech Rafael Correa Delgado permanently pronounced in Sabatinas<sup>1</sup> and other political spaces and judicial actions, was the most visible forms of human rights violations of much of the population. Along with the indigenous people, the labor movement and the environmentalists, one of the sectors most affected by the correism decade was the

<sup>&</sup>lt;sup>1</sup> Sabatinas: these are the so-called citizens' accountable bonds of the *correista* government broadcast on radio and television, on Saturdays, from 2007 to 2017.



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teachers. Examples include: increasing working hours to 40 hours per week with pay reductions, illegalization to THE UNE, ignorance of retirement incentives, forced removals of teachers, absurd complementary activities that overwhelmed the teacher, both on campus and at home.

The contributions described to the Ecuadorian Magisterium contradict humanist currents that advocate the constant need to progress in the quality of education systems, with vital input from the teacher. According to McKinsey & Company (2008), "the quality of an education system has as its roof in the quality of its teachers" (p. 15). Many Asian countries are prioritizing quality teacher training and then socially and economically supporting the profession, as a factor in the success of the social system since, by prioritizing teaching wellbeing, their work becomes more effective and consequently the above expectations is the "traditional respect for the teacher" (McKinsey & Company, 2008, p. 15).

Also, multilateral agencies such as the United Nations (UN-UNESCO) have launched actions of teaching claim, evidenced in the Incheon Declaration (2015), which in the fourth Sustainable Development Goal states the following:

(...) we will ensure that teachers and educators are empowered, properly recruited, well trained, professionally qualified, motivated and supported within systems that have sufficient resources, are efficient and that are effectively targeted (p. 8).

The purpose of this study is to explore the status of the rights of teachers and their union during the government period of Rafael Correa Delgado. It addresses the right-working variables of teachers and trade union rights. The first aspect of the research focuses on the situation of individual rights of the Ecuadorian Magisterium based on international conventions, Ecuadorian constitutional mandates, regulations, provisions in force during the study period. The second aspect describes the situation of the UNE, as the teaching guild with the greatest impact on the defense and vindication of the Ecuadorian Magisterium. The study is developed through a bibliographic-documentary and empirical analysis, by taking data from teachers belonging to the public labor sector.

## 2. Socio-political context of correism

In the Latin American context, since the 70s of the twentieth century, neoliberalism had an impact on Latin America and Ecuadorian governments that made policy-guided decisions such as, "the privatization of education that brings teachers down to the disqualification from the profession, removing recognition and autonomy" (Terachi, 2012, 53). According to isch in Ecuador during the last democratic stage, prior to the correism, from 1980 to 2007, neoliberal projects in education were a constant destruction of the national and local, by impositions of financial bodies such as the International Monetary Fund (IMF) and the World Bank. It was the country's external debt that pressured the intervention of these corporations that determined changes contrary to an education with national vision, confirmed in reports of the banks managing these projects (Isch, 2011, p 3-4).

Undoubtedly, public educational quality was affected by neoliberal projects, while governments strategically systematized the policy of blaming teaching for the poor learning outcomes evidenced in the results of the assessments such as the Baccalaureate. In these conditions the valid option was social protest in the streets, to make their discontent heard. Interestingly in this protest Alianza País was born (AP), led by Rafael Correa, with high popular support, a political movement committed to a transformation in the social



superstructure, which was done in the 2008 Constitution, but which left the wealth intact held by the bourgeoisie.

## 2.1 The good living for the movement "Alianza País" (AP)

The Sumak Kawsay, or Good Living<sup>2</sup>, being the pre-Columbian indigenous philosophy, was coined by AP to inform its national development plan. Correa used it deftly in his speech in his political rhetoric, as an antithesis to combat the old neoliberal political practice that had been the paradigm of previous governments (Contrato Social por la Educación, 2012). according to Yánez at that time the Andean philosophy of the Good Living of the Correist government emerges as a foundation that prioritizes the rights and the well-being of citizens, with which each tries to forge a dignified life (Yánez, 2014, p. 8).

AP in his mass discourse proclaimed the power of the people, conceived as a constituent in his relationship with the state. Society became a transcendent player in state decision-making and subject to rights (Yánez, 2014, p. 9). Unfortunately, as moving from political statements and promises to government actions, contradictions are expressed. In the same time Rafael Correa's terms "The President of the Republic is not only head of the Executive Branch, he is head of the entire Ecuadorian State" (Acosta ,2009, p. 2), subjugating the other functions of the state and above all the people in the construction of policies, since those in charge were the agencies of the government as always (Rojas, Aguilar, Piedra, 2018, p. 53).

## 2.2 The vision of the teacher's right

For Sanchez, the Magisterium throughout history has fought against the oppression of the state, as a key player in the transformation of society, especially with its contribution to the social progress and the quality of the education system, thus it analyzes through the Sociological perspective. However, from this important role that the teacher has undeniably had, in Ecuador, historically, the teaching rights have been relegated by governments, especially in the Correist decade (Sánchez, 2016, p. 12).

An emblematic project of the AP government is the "proclamation of the 2008 Constitution, which prioritizes the rights of society and nature over capital" (Zibell, 2017, p. 21). Although social investment in the first period of government improves for education and reflects relative improvement in teacher pay, which rises minimally, i.e.; the changes were superficial, because in practice the same neoliberal prescriptions were applied in education (Isch, 2011, p. 376). It is precisely the beginning of conflicts between the government and teachers over the violation of rights by the Ecuadorian state.

#### 2.3 Situation of the teacher's rights

It is a universal human right, the expression of opinion that people and society have, this right should not be violated by actions of the state; however, in Ecuador, according to Plan V (2016):

Since the advent of correism to power (...) there have been at least 1409 cases of aggressions to freedom of expression in Ecuador, ranging from "the selective and arbitrary application of legislation that already counts as one of the most restrictive prior censorship through the imposition of content by different authorities by abusing the right to reply and rectification (applied interchangeably), dozens of cases of persecution of

<sup>&</sup>lt;sup>2</sup> Sumak Kawsay: Simbaña (2011) cited by Arteaga-Cruz (2017), a proposal that aims to focus society on the subject, an attempt to rebuild the subject-object link, a community creation inspired by the ayllu and the proposal of the indigenous movement of Ecuador (p. 909).



tweeters, bloggers and even Facebook page managers, censorship of content on the Internet (...), the closure of media and seizure of teams, new insults and stigmatizing discourse about journalistic targets physical assaults, imprisonment and repression against those who exercise the right to protest (p. 21).

It is clear that opinion rights were restricted to social movements that generated critical thinking, social struggle. This restriction obviously fell on the organization of teaching, the UNE which was greatly affected, as it was "prohibited from the development of trade union activities in state educational establishments, calling them political acts that destabilize democratic regime" (Isch, 2015, p. 12), which affected the actions of the organization of teachers, but which contrary to the intention to disappear it, the teachers defended it permanently, showing recognition for its historical action.

#### 2.4 Legal security of the UNE

The legal certainty in terms posed for the Ecuadorian context by Zabala-Egas (2011) asserts that it is "any act, whether by action or omission from the authority that injures or intends to injure it by imminently causing harm" (p. 14). Hence, the state is the institution obliged to ensure protection for the society, but being the cause of violence against the Magisterium, it violates constitutional and legal norms. UNE, for a decade, was the victim of legal uncertainty and aggression by the PA government.

A political decision that determined the beginning of the conflict between the government and the teaching guild was the implementation of the teacher evaluation in 2009, instead of training, the dialogue with the magisterium about the political mechanism was a verbal attack and a legal action of the president of the republic. This action that should have been technical became: "a very tough battle, more political than technical, with repression in the streets and police in the classroom, aimed above all to weaken the union and teachers. The UNE was crushed to be defeated" sentenced Correa" (Torres R., 2009, p. w/p). The permanent, unmeasured and systematic offenses of the government's repressive apparatus against UNE obtained the planned effect, and affected the legal certainty of the UNE, as Pallasco (2014) states that:

(...) no more mistreatment, no more disqualification (...) from military at the gates to insults of the representative: mediocre, corrupt, lazy (...) and the teacher was stigmatized (...); this is how teachers, even though national and international regulations are supported by the government, they were violated, fostering fear, harming education, the student and the teacher (p. 41).

The correist demagogic offer to align the teachers adept to this political positions was the supposed magisterial revaluation, however, this process minimizes teachers, and generates a fight reaction from UNE, which consequently was the victim of the lynching of the public media, degradation of its leaders, even degradation of social sectors towards teaching. UNE's struggle focused on labor rights of "social content to ensure the best living conditions" (Aguilar, 1998, p. 96), such as: salary, retirement, social stability, scale, merit contests, among others.

#### 2.5 Wage and labor rights

Wage is a right that every worker receives, according to his/her time and ability to work, as determined by the UN, through (National Commission on Economic, Social and Cultural Rights, 2012, p. 11). Therefore, "teacher's wage is a right and at the same time, an important



factor that affects the quality of education, derived from experience, performance and evaluations, which are factors that guarantee remuneration, as mentioned by" (Organic Law of Intercultural Education, 2011, p.21). It was precisely the salary one of the fundamental elements that Correa's government used to suffocate the teacher economically, since, while there was a slight increase, it had no equality with the increase of the weekly working day, from 25 to 40 hours, which inevitably led to an accelerated impoverishment of the teaching profession.

The salary of the Ecuadorian teacher prior to the reforms of the Correa government, as a conquest of his struggle, consisted of several salary items such as: basic salary and additional as the increase by category, by function, by type of institution, location rural bonus, urban, border and Galapagos, seniority compensation, educational and family allowance, and retirement incentive (Congreso Nacional Ecuador, 2000). All these wage factors were unified into a single salary, achieved with the participation of UNE.

Wage reforms to some extent benefited teachers who in 2012 began their teaching on a salary of \$741, a considerable increase compared to the previous basic salary of \$330 plus bonuses and subsidies. Clearly it was about improving the teacher's payment, but it was not an equitable increase, the reform is full when it is possible to maintain all 10 categories on the ladder (Posso, 2014, p. 103). But the teaching location on the new pay scale has taken almost a decade, so much so that to this day it does not benefit the entire public magisterium.

Another policy implemented is the impact of the teaching performance on the salary, i.e. (2011) the result of the evaluation affected teachers, as well as the "variable remuneration for efficiency. - Variable remuneration will be linked to the result obtained by the teacher in the public career in the evaluation applied by the National Institute of Educational Assessment (...)" (p. 36), was a government policy that was implemented to achieve efficiency of public servants among other teachers.

according to Isch the teaching evaluation carried out by the Ministry of Education of Ecuador, "as a mechanism of professional improvement, and above all to meet standards of educational quality, was finally a test of award and punishment for the Magisterium" (Isch, 2010, p. 20). At the same time that the weekly class hours were increased to 30 and 10 hours for administrative activities, also increased the pedagogical function, which limits the teacher's thinking, read and write about his experience (Web del maestro CMF, 2018). Concomitantly to the provisions explained, according to Vargas, cited by Chamorro (2018):

Teachers have an overwork, they spend more time filling matrices, collecting evidence, taking photos to present to institutional authorities and districts. (...), the growing importance that MinEduc attaches to technocratic and instrumental approaches to education and pedagogy. (p. 83)

Since the state's correist administration, today the bureaucratic overload forced on the teacher is confirmed, in disarray of the quality of education, since the indicators are not encouraging, despite the apparent changes so touted by the previous government, and accepted to the beginning of Lenin Moreno's government, but the same "Fander Falconí, head of MinEduc, reported that an excessive overload was detected to the professors" (El Telegrafo, 2006, p. 2), which is an important self-criticism of power.



#### 2.6 Job stability and teaching retirement

From the government of AP, especially to position the Network of Teachers, in the development of UNE, Correa (2016) repeatedly stated that in Ecuador there were a very high number, almost 60 thousand of teachers, working in public campuses without contracts, nor were registered in the Ministry of Education, who received wages below legal, before corism (p. 10.11), contrary to what was touted from the official spheres, Isch (2010) asserts that:

(...) not even the generation of the 12,000 positions agreed at the beginning of the government until November 2008 had been delivered by only a close to 3,000 appointments while more than 6,000 teachers would be working for temporary contracts, maintaining the labor easing typical of neoliberalism (p. 18)

## Despite the continuing government propaganda, especially in the Sabatinas, five years later, as early as 2014, the figures did not vary much, as Isch argues (2015):

Out of the 147.129.000 teachers in the national education system through 2013, only 99,611 have an appointment that guarantees their stability, while 47,518 work under the "temporary contract" modality, with a salary between \$430 and \$530 (usually 50% of the salary of those who have an appointment with job stability) (p. 12).

Concomitantly, political management models such as labor impoverishment, low wages, basic rights affectation were maintained, this was a key point where the government managed to manipulate teachers to support the political strategy of a new guild, the Network of Teachers, in The Lost Decade in Education. In this regard, Vargas-Meza (2016) supports:

The hired teachers do not receive their final appointment. This is a cause for blackmail, because they must go to the meetings must behave. Lately the Districts hire teachers for the school year, they are fired telling them that this position will be held by those who won the "Be Teacher" contest (p. 48).

The narrative of the AP movement raised false hopes about teaching salaries, as it applied the same prescriptions of neoliberal administrations, even with the greatest ideological burden, violated the guarantee of rights, permanently violated the LOEI<sup>3</sup> and above all the Constitution that "(...) prohibits the existence of any precarious contract" (Isch, 2010, 19). Since the advent of power in 2007, AP "has offered to improve the retirement of teachers and Ecuadorian workers in general, who were retiring at very advanced age and with outrageous wages" (Correa, 2016, p. 7), despite the proposal to revalue the teacher; the government of AP in 2011, through the reforms to LOEI, executes its offer as it repeals the "Supreme Decree 719, published in the RO of May 5, 1964, which established an additional contribution of 5% of the employer and personal contributions of the Magisterium to finance teachers' retirement" (Posso, 2014, p. 98).

In 2015 Correa's government dealt another political blow to the Ecuadorian Magisterium, by withdrawing the resources with which the state financed pensions. The government withdraws 40% of official support, breaking the guarantee and obligation of the state with retirees provided by the Organic Law for Labor Justice and Recognition of Work in the

<sup>&</sup>lt;sup>3</sup> Ley Orgánica de Educación Intercultural.



Home, passed by the National Assembly in 2015, with votes from the Deputies of AP (El Universo, 2015).

In May 2015, the Correa government, on the grounds that the state assisted private cessation funds of workers in public institutions in the 1999, among others, to the Severance Fund of the Ecuadorian Magisterium (FCME), it granted the administration of teaching savings to IESS, under the section 220 of the "Social Security Act. The amount taken by the correism was approximately \$402 million" (Unión Nacional de Educadores, 2015, p. 5).

One of the defaults of correism that most affected the Magisterium was not having paid off pension debts to Ecuadorian teachers. It is emblematic the case of "Cumandá Páez, teacher who died of cancer in the stomach without receiving the stimuli to volunteer retirement. Still alive, she recorded videos criticizing the legal procedures she was required to follow to show that she could no longer work" (Contrato Social por la Educación, p. 4). The Correist government dislocated its responsibility, arguing that the causes were international economic problems such as the "collapse of the price of oil, appreciation of the dollar, slowdown of China, which is the main financier of the planet" (Correa, 2016, p. 8).

#### 2.7 Trade union rights

The new 2008 Constitution provides citizen participation and Good Living as novel mandates that encourage the inclusion of society. In practice these principles are broken, since these "prohibit the stoppage of public services, including education, according to Article 326 numeral 15" (Posso, 2014, p. 110), which violates the rights of public workers to resistance and social struggle.

In 2016 as an objective example of the criminalization of social struggle, "The government of President Rafael Correa dissolved (...) the main guild of state-dependent teachers, the National Union of Educators, arguing that it does not comply with its own statutes and regulations on social organizations." (El Universo, 2016, p. 1), thus it attacked the guild's representativeness, underperforming the ability to defend the teachers' rights. This provision generated protests from UNE and teachers, to which correism launched a sustained propaganda to: "associate the guild of teachers: vagrancy, inoperability, politicization and inefficiency. A position that was otherwise leveraged in a kind of wear and tear " (Posso, 2014, 119).

By 2011, the conflict between the government and the teachers' guild would be reaffirmed, since LOEI restricts "the possibilities of the strike and the social mobilization of the guild, as a mechanism to fight for the rights "(...), fundamentally, it limits the capacity of guild to add the demands of their members" (Posso, 2014, p. 101). This provision undermined the union's right to demand the government by taking out power from the guild, the regulations that were systematically forging were intended to disappear the EUN, withdrawing its legal status as it finally happened.

#### 2.8 Disabling the UNE, the emergence of the network of teachers

Since 2010 in the government discourse "Rafael Correa called for a new UNE" (Isch, 2010, p. 18), all government actions denote the government's initiative to pursue and disqualify UNE, which had its effect until 2015, in which the Teachers' Network emerges as a new teachers' union created by AP, on which Pinos (2017) stated that: "The government pushed for the creation of a new union called the Teachers' Network for the Educational Revolution, its membership is growing, even if its composition, structure, and influence do not reach the magnitude of the UNE" (p. 6).



In the RED's first anniversary speech, given by his ideologue Rafael Correa, was stated that: "(...) the teachers enrolled in Ecuador's Network of Teachers not to take care a government or a political party, but to take care of the nation: our children, our teenagers, our youth, and their education" (Correa, 2016, 4). This guild was an intermediary for the entry of any professional, including high schoolers to the public magisterium, a factor that in the following years caused serious effects in the deterioration of educational quality, including acts of harassment and rape of minors, as recorded in Vistazo magazine, according to which "A special commission of the National Assembly determined the political responsibility of former education ministers Augusto Espinosa and Freddy Peñafiel in cases of sexual abuse in schools" (Santos, 2018, pág. 4).

## 3. Methodology

- 1. The focus of the study is qualitative, because the variables under study were approached, through an in-depth analysis; the design is non-experimental because variables are not manipulated, it is also characteristic: retrospective and transversal, since it was about happened events; It is descriptive because teacher rights are characterized during the correist government from 2007 to 2017. The phenomenon is analyzed in its socio-natural reality. Finally, it is bibliographic-documentary and field type because it is based on published writings and perceptions of public teachers.
- 2. A survey was applied to active members of the public teaching. The population was 300 public teachers from different schools in the province of Pichincha. The questionnaire was answered by 33 teachers, 11% of the total, through the Google Drive program, open for 30 days. Sampling was intentional, a method that, as Alaminos (2006) states, "constitutes a valid non-probabilistic strategy for data collection, especially for small and very specific samples" (p. 50). The sample has limited representativeness. Several teachers expressed their decision not to respond for fear of government reprisals. Complementarily, interviews were carried out with experts: teachers of basic and high school education, retirees, former / leaders of the UNE, an advisor to the dissolved National Constituent Assembly and a professor at the Simón Bolívar Andean University.
- 3. The database was organized and descriptive statistics were processed in the SPSS program, then dynamic analysis was worked on to obtain results, analyze discuss and reach conclusions. Table 1 shows the sampling summary.

	Frequency	Frequency Percentage	
			percentage
Femenine	17	51.5	51.5
Masculine	16	48.5	100.0
Total	33	100.0	

Table 1. Teachers surveyed by gender

## 4. Results and discussion

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The empirical results were obtained from the survey applied to teachers and interview with experts, the data of the survey was subjected to statistical analysis, consequently the most significant findings that are synthesized are established in the following:

An essential variable for analyzing the status of teaching rights is the freedom of opinion that teachers considered transgressed. Table 2 summarizes the result of the opinion rights

	Frequency	Percentage	Accumulated percentage
Totally disagree	2	6.1	6.1
Disagree	5	15.2	21.2
Neither agree nor disagree	3	9.1	30.3
Agree	11	33.3	63.6
Totally agree	12	36.4	100.0
Total	33	100.0	

about transgression item, the most significant responses of which are: 36.4% of teachers surveyed, fully agree, and in the same direction, 33% agree. Integrally, 69.7% of teachers realize that their rights have been transgressive. Only 20% of teachers say they have not been hit by their opinion rights.

Table 2. Freedom of opinion

A fundamental human right is freedom of assembly and peaceful association for trade union purposes, recognized in the UN Human Rights Declaration and the 2008 Constitution. The consistent results in Table 3 illustrate that 56.6%, more than half of the teachers surveyed, responded to the options: totally agree, that there was an impact on the freedom of assembly for Ecuadorian teachers in the correist regime. A different position expresses 21% of teachers, who consider that there were no impacts on freedom of assembly.

Free	quenc	-	Accumulated percentage
у	Perc	entage	
Totally disagree	2	6.1	6.1
Disagree	5	15.2	21.2
Neither agree nor disagree	7	21.2	42.4
Agree	7	21.2	63.6
Totally agree	12	36.4	100.0
Total	33	100.0	

Table 3. Freedom of assembly and teachers' guild

Table 4 summarizes the teaching perceptions of the impact on their trade union rights by the Correist government, which undermined the participation of their historical magisterial guild, the UNE, through policies, regulations, legal actions and aggressive discourse, which ended up causing irreparable involvement of trade union rights. 72.7% of respondents fully agree and agree on the reduction of teaching union rights. An opposing position shows 18% of teachers, who strongly disagree and disagree, since they consider that their trade union rights have not been affected.

	Frequency	Percentage	Accumulated
			percentage
Totally disagree	2	6.1	6.1
Disagree	4	12.1	18.2
Neither agree nor disagree	3	9.1	27.3
Agree	11	33.3	60.6



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Totally agree	13	39.4	100.0
Total	33	100.0	

Table 4. Affectation on the rights of the teachers

Table 5 summarizes the analysis of the conflict between the teaching guild and the government, which made UNE as the responsible of the country's education crisis. The empirical fact shows that 72.5% of teachers investigated align with the choice: totally disagree and disagree, thus expressing their opposition to the fact that they are the drivers of the Ecuadorian educational crisis; while only 15% of teachers were indifferent to the question, eventually 12% of the respondents are aligned with the discourse's statements about the aspect under study.

	Frequency	Percentage	Accumulated
			percentage
Totally disagree	16	48.5	48.5
Disagree	8	24.2	72.7
Neither agree nor disagree	5	15.2	87.9
Agree	2	6.1	93.9
Totally agree	2	6.1	100.0
Total	33	100.0	

Table 5. Educative crisis, UNE, politics

Table 6 shows the analysis of the variable that state if the Correist government improved the labor rights of teachers. In this regard, 66.7% of respondents strongly disagree and disagree, i.e., their perception is contrary to their employment rights having improved. 24% have a position contrary to most responses, who believe that the conditions of their labor rights did improve in the government of Rafael Correa.

	Frequency	Percentage	Accumulated
			percentage
Totally disagree	13	39.4	39.4
Disagree	9	27.3	66.7
Neither agree nor disagree	3	9.1	75.8
Agree	5	15.2	90.9
Totally agree	3	9.1	100.0
Total	33	100.0	

Table 6. Labor rights of teachers

Table 7 summarizes teachers' assessments of UNE participation in Ministry of Education committees to manage processes of entry, mobility and teacher's promotion. A broad 72.7% lean towards totally agree and agree options that the teachers' union lost the ability to contribute to the decision-making. The government's strategy was to create the so-called professional defense commissions. Only 18.2% believe that the Magisterium retained participation rights.

	Frequency	Percentage	Accumulated percentage
Totally disagree	2	6.1	6.1
Disagree	4	12.1	18.2
Neither agree nor disagree	3	9.1	27.3



Agree	11	33.3	60.6
Totally agree	13	39.4	100.0
Total	33	100.0	

Table 7. UNE Participation

The results about the correct application of the LOEI and the teaching regulations which govern the professional development for mobility and promotion are presented in Table 8. 63.6% of teachers respond that they totally disagree and disagree with the fact that correism respected and applied the laws in force. But there is also a considerable 27.3% of teachers, who perceive that there was adequate application of teaching development regulations.

Frequenc		Accumulated percentage	
у	P	Percentage	
Totally disagree	11	33.3	33.3
Disagree	10	30.3	63.6
Neither agree nor disagree	3	9.1	72.7
Agree	6	18.2	90.9
Totally agree	3	9.1	100.0
Total	33	100.0	

Table 8. LOEI application

One of the most decisive elements for the human well-being is the payment for the work done. In this item, when consulting on a fair teacher remuneration implemented by the correism, reflecting the dedication to the working weekly, as shown in Table 9, 66.7% disagree and totally disagree, i.e., the majority of respondents consider that their government-fixed allowance did not correspond to the increased working day of 25 to 40 hours per week. Prior to the new weekly day, many teachers supplemented their salary with additional contracts, which impoverished the family well-being.

	Frequency	Valid	Accumulated
		percentage	percentage
Totally disagree	13	39.4	39.4
Disagree	9	27.3	66.7
Neither agree nor disagree	3	9.1	75.8
Agree	5	15.2	90.9
Totally agree	3	9.1	100.0
Total	33	100.0	

Table 9. Salary and working hours

Table 10 summarizes the work flexibility applied in the teacher's procurement by correism. The main result is that more than 66.7% of teachers say they strongly disagree and disagree with the government implementing permanent teacher procurement and in the application of the processes established by the teaching's hierarchy. Temporary recruitment increased for teachers without training and were conditioned by power. 24.3% of teachers surveyed adhere to the options fully agree and agree that there was job stability, thus they have not been affected by employment stability rights.



	Frequency Per	e	mulated entage
Totally disagree	4	12.1	12.1
Disagree	6	18.2	30.3
Neither agree nor disagree	6	18.2	48.5
Agree	9	27.3	75.8
Totally agree	8	24.2	100.0
Total	33	100.0	

Table 10. Working flexibility

Table 11 draws the outcome of the question about teaching retirement and its impact on the policies implemented in the Correist government. The response rate is that almost 70% of teachers opted for the options: totally agree and agree, which reflects that the teacher's retirement is affected by policies implemented from the power. Only a small 18% of teachers consider that there is no transgression to the teaching retirement, i.e., more than half of respondents showed an impact on the right to a worthy retirement of teachers.

	Frequency	Percentage	Accumulated percentage
Totally disagree	3	9.1	9.1
Disagree	3	9.1	18.2
Neither agree nor disagree	4	12.1	30.3
Agree	9	27.3	57.6
Totally agree	14	42.4	100.0
Total	33	100.0	

Table 11. Teacher's retirement

According to the results obtained in the survey regarding the status of teaching rights, as shown in Table 12, there is a relative concordance among the teachers surveyed. 72.7% of respondents, i.e., three out of four teachers, strongly disagree and disagree that the rights of Ecuadorian teachers enacted in the 2008 Constitution, LOEI, LOSEP and the seventh policy of the Ten-Year Plan have been respected during the Correist government.

	Frequency	Percentage	Accumulated
			percentage
Totally disagree	14	42.4	42.4
Disagree	10	30.3	72.7
Neither agree nor disagree	3	9.1	81.8
Agree	4	12.1	93.9
Totally agree	2	6.1	100.0
Total	33	100.0	

Table 12. Respect of the teacher's rights

According to Table 13 about the education crisis in Ecuador, 73% of teachers surveyed align with the options totally disagree and disagree that the educational crisis in Ecuador is the responsibility of teachers and their guild. The public policies of education are emanating from the government and approved by the National Assembly. The teacher has the responsibility to apply curricular processes in the school. The teaching guild they have permanently made educational proposals to the Ministry of Education that were not accepted, and rather they applied neoliberal policies.

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	Frequency	Percentage	Accumulated
			percentage
Totally disagree	1	6 48	.5 48.5
Disagree		8 24	.2 72.7
Neither agree nor disagree		5 15	.2 87.9
Agree		2 6	.1 93.9
Totally agree		2 6	.1 100.0
Total	3	3 100	.0

Table 13. Teaching perception about the educative crisis

Table 14 condenses teaching perceptions that indicates that during the Correist government the Ecuadorian Magisterium suffered sanctions and even dismissals from work. It is noted that most of the respondents, about 64% fully agree and agree to fear repression. It can therefore be inferred that teachers were afraid of labor sanctions, this factor determined that the vast majority demobilize, focus on complying with provisions of their educational authorities and even isolate themselves from other teachers, so as not to be persecuted for alleged or rights-defense acts. The correist government undoubtedly implemented an extremely repressive and sanctioning control policy for all teachers as a state policy.

	Frequency	Percentage	Accumulate
			d percentage
Totally disagree	3	9.1	9.1
Disagree	3	9.1	l 18.2
Neither agree nor disagree	6	18.2	2 36.4
Agree	7	21.2	2 57.6
Totally agree	14	42.4	ł 100.0
Total	33	100.0	)

Table 14. Teacher perception by fear repression

The qualitative information confirming the data provided by the survey was obtained through interviews applied to Ecuadorian academics linked to the phenomenon under study, i.e., the deterioration of teaching rights during the 2007-2017 period. The analysis and interpretation of the interview was implemented through qualitative procedures to analyze 'raw' texts, such as the keyword method in context (KWIC)," (Fernández-Núñez, 2006, p. 3). The KeyWord In Context (KWIC) or in-place keyword is relevant for working with synonyms and antonyms, based on qualitative and subjective data. Interview data were encoded in a table with the expert responses, then individual analysis was performed by question, as well as a comprehensive analysis of the data and interpretation; the most relevant aspects found are:

- The experts interviewed mostly express that there was a deterioration in the teachers' opinions, as well as in their trade union, including threats, persecution and sanctions on teachers.
- While most of the interviewees highlight their struggle for the public teaching rights in the union situation of the UNE in the correist moment, it is valued as an antagonistic social organization with the government. Because of its firm and consistent position, UNE was abused by the political power, which went so far as to be illegalized and seized from its assets. At the same time as political action by the government and its political movement, the network of professors attached to the



government was created to counter the UNE. On the teaching guild, most of the interviewees listed as a momentary organization of the Correist government.

- Interviewees also highlight as a relevant aspect the sanctions of opposition teachers attacked by the government, while some indicate that they protest due to economic problems, other teachers for opposing the education system that has not changed or by being members of the UNE. Public teachers characterize the correist government as totalitarian-fascist against all forms of social struggle, focusing mainly on teachers and public servants.
- A factor widely explained by the experts was the elimination of salary components in the teacher payment. Wage reduction is a form of state savings, and also a form of over-exploitation.

## 5. Conclusions

About the objective outlined in the article, the main conclusions are presented: The evidence shows that a left discourse was enacted during the Correist government, contrary to its repressive practice, since it affected the teaching right to enjoy quality of life in its professional and trade union performance, i.e., the revaluation of the teaching profession was only a political slogan. Teaching labor rights in the Correist government effectively had manifestations of disrespect to: international human rights agreements, as well as domestic legal regulations, and may even have committed human rights violations of Ecuadorian teachers.

The correist time was characterized by the violation of the teaching rights of: trade union, resistance organization, freedom of opinion, wage rights and the right to work. Other educational rights affected are: professional development, mobility, retirement.

Undoubtedly the decade of correist implemented a policy of extremely repressive and sanctioning control for the public teachers, as a state policy. According to Sánchez, 2016, UNESCO, 2015 and McKinsey & Company, 2008, adequate attention to the teaching sector has a very strong impact on the educational quality of a country. Providing the state wellness to each teacher so that he/she can enjoy an adequate standard of living, the states generates a high performance that contributes to the development of the society. The Correist practice contradicts what has been said, because the actions deteriorated the life of the Ecuadorian teacher, demotivated the teacher, and impoverished the Ecuadorian education.

The harassment and illegalization of UNE, as well as the creation and support of the network of Teachers, had an impact on teaching, as teachers felt unprotected, there was professional immobilization, relocation and even dismissal. A number of cases of correist against Ecuadorian teachers, which will surely be done in the future, are still to be clarified.



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